



2019

Dordt University 2019-20 Catalog

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2019-20 Catalog

This catalog is published for the faculty and students of Dordt University. We have made every effort to ensure the accuracy of information. However, the university reserves the right to make changes and apply them to registered and accepted students throughout the academic year.

Undergraduate Academic Calendar

2019-20	2020-21 (tentative)	Day	Activity
Aug 21-23	Aug 19-21	Wed-Fri	International Student Orientation
Aug 24-26	Aug 22-24	Sat-Mon	Freshman Orientation
Aug 26	Aug 24	Monday	Transfer/Returning Student Orientation
Aug 27	Aug 25	Tuesday	Classes begin – 8 a.m.
Aug 30	Aug 28	Friday	Convocation – 11 a.m.
Oct 3, 4	Oct 1, 2	Thurs-Fri	Reading Days – Heartland Teachers' Conference, no classes
Oct 18	Oct 16	Friday	End of first set of half-courses
Oct 21	Oct 19	Monday	Beginning of second set of half-courses
Nov 4-15	Nov 2-13		Registration for spring semester
Nov 27	Nov 25	Wednesday	Thanksgiving recess – 8 a.m.
Dec 3	Dec 1	Tuesday	Classes resume – 8 a.m.
Dec. 12	Dec. 10	Thursday	Review Day – a.m.
Dec. 12	Dec. 10	Thursday	Testing – p.m.
Dec 13	Dec 11	Friday	Testing – a.m. and p.m.
Dec 16-17	Dec 14-15	Mon-Tues	Testing – a.m. and p.m.
Jan 8	Jan 6	Wednesday	New/Transfer/Returning Student Orientation
Jan 9	Jan 7	Thursday	Spring semester begins – 8 a.m.
Feb 27	Feb 25	Thursday	End of first set of half-courses
Feb 28	Feb 26	Friday	Beginning of second set of half-courses
Mar 6	Mar 5	Friday	Spring vacation – 8 a.m.
Mar 17	Mar 16	Tuesday	Classes resume – 8 a.m.
Apr 3-13	Apr 7-19		Registration for fall semester
Apr 10	Apr 2	Friday	Easter recess begins – 8 a.m.
Apr 14	Apr 6	Tuesday	Classes resume – 8 a.m.
Apr 30	Apr 29	Thursday	Assessment Day/Ideafest
May 4	May 3	Monday	Review Day – a.m.
May 4	May 3	Monday	Testing – p.m.
May 5-7	May 4-6	Tues-Thurs	Testing – a.m. and p.m.
May 8	May 7	Friday	Commencement – 10 a.m.
May 20*	TBD	Wednesday	Summer session begins
August 18*	TBD	Tuesday	Summer session ends

**these dates have not been finalized and are subject to change*

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Overview of Dordt University

Principles and Purposes

Dordt University owes its existence to a community whose faith commitment demands obedience to biblical principles in all of life. This religious commitment, historically known as the Reformed faith, has always been the basis of education at Dordt University.

The Dordt University community confesses that the Scriptures are the Word of God. As God's infallibly and authoritatively inspired revelation, the Bible reveals the way of salvation in Jesus Christ, requires a life of obedience to the Lord, and provides the key to understanding, interpreting, and finding purpose in life.

In various documents, over its half-century of existence, Dordt has articulated its mission as an institution in the Reformed theological tradition, committed to promoting student learning for life-long Christian service. From the early statements of Dordt's founders to the university's current statement of purpose, each has consistently sounded the same theme. That theme is described most concisely in our mission statement, which guides the work of the institutional planning committee:

Dordt University is an institution of higher education committed to the Reformed Christian perspective. Its mission is to equip students, alumni, and the broader community to work effectively toward Christ-centered renewal in all aspects of contemporary life. We carry out our educational task by:

- *developing a biblical understanding of creation and culture,*
- *discerning the pervasive effects of sin throughout our world,*
- *celebrating and proclaiming the redemptive rule of Christ over all of life and creation,*
- *nurturing a commitment to challenging the forces that distort God's good creation and all human activity,*
- *offering academic programs, maintaining institutional practices, and conducting social activities in a visionary, integrated, biblically informed manner,*
- *and fostering a climate in which discipleship becomes a practiced way of life both on and off campus.*

A Kingdom Perspective Scripture and creation reveal to us a sovereign God. Nothing exists without him; all things are under his control and find their goal and purpose in his glory. The creation is God's kingdom. The Bible also tells us that God created humankind in his image. People are covenantally bound to their creator by his law that calls for loving obedience.

After Adam and Eve's fall into sin, humankind, though called to develop and care for God's world, began to treat creation as an object of exploitation. Rather than serving the King, people abandoned themselves and the rest of creation to division and strife, misery, and death. But God came to us with his Word of grace. Through the death and resurrection of Jesus Christ, God has reclaimed what was deformed and distorted by sin. Even though the effect of the fall continues, Christ has rescued creation from the curse of sin and reigns as King over all. He summons those he has redeemed to work for the expression of his kingdom everywhere.

Serviceable Insight Our mandate to be busy in Christ's kingdom requires that we study, examine, and understand his world. Christian educational institutions must work to gain and transmit insights into the created order.

The Christian's understanding of God's handiwork is distorted by centuries of secularization. Dordt University is faced with the challenge of developing genuine Christian insight — an understanding of the creation illumined by the liberating light of the Scriptures.

Christians in a technological and secular civilization need the ability to distinguish sharply, to think critically, and to judge wisely. Dordt University must provide the kind of insight that enables Christians to carry out their tasks effectively in a complicated world.

Such insight is not merely theoretical. While Christian insight reflects an understanding of the structure and workings of God's created order, it includes other dimensions as well: the practical ability to carry out one's task in loving obedience and service and the desire to function effectively as a kingdom citizen.

A Christian Curriculum The curriculum is central to the implementation of the educational task of Dordt University. It functions as a basic means for encouraging student learning and transmitting serviceable insight. Those fields of investigation form the backbone of education at Dordt University. A curriculum of various academic disciplines, such as language, natural science, and social science, make up the foundation of every student's education at Dordt.

Students at Dordt are also required to study history, philosophy, and contemporary issues in order to gain insight into how mankind has responded to God's call to service within his creation. Through this requirement, students are challenged to discern the spirits of the age and to work for genuine reformation in culture and society.

Dordt seeks to provide insight into the nature and demands of the various vocations and professions. Majors and pre-professional programs form another essential part of the curriculum.

Throughout the curriculum, students are helped to develop the analytic, communicative, artistic, and physical skills that are essential for effective Christian service.

Education for the Whole Person The co-curricular aspects of Dordt University also play a vital role in the implementation of the educational task of Dordt University. Therefore, Dordt seeks to provide a wide range of opportunities that develop and enhance serviceable insight.

Dordt University cannot count itself truly successful if its graduates possess knowledge and skill yet lack the desire to carry out their tasks in service and loving obedience. The university works to foster this attitude by promoting social and devotional activities. Such activities are not considered mere additions to the academic task; Dordt University attempts to integrate them into a total pattern of curricular and co-curricular activity, all of which provide students with serviceable insight.

History

Dordt University began in 1953 as Midwest Christian Junior College. At the time, there was a dearth of qualified Christian school teachers in the area, and the new college sought to fill that void. The college's doors opened in 1955, with 35 enrolled students and five faculty members. The campus was comprised of a new four-classroom building; the property was set on a former mink farm and surrounded by fields of crops.

Once the institution became a four-year college, its name was changed to Dordt College in honor of the Synod of Dordt held in Dordrecht, the Netherlands, in 1618-19, a synod which emphasized the sovereignty of God through his electing grace.

Dordt's first four-year B.A. degrees were awarded to a graduating class of 58 in 1965. The college grew rapidly in the 1960s and 1970s, with enrollment climbing above 1,200. Many faculty members, intending to teach here only a few years, became committed to the college mission and remained for their entire careers.

Although it began as a college for training up Christian school teachers, Dordt has expanded its academic offerings to include programs in agriculture, nursing, engineering, business, social work, criminal justice, construction management, international business, and more.

Over the years, Dordt continued to add and deepen academic and co-curricular programs that, as Dordt's mission says, "equip students, alumni, and the broader community to work effectively toward Christ-centered renewal in all aspects of contemporary life." In doing so, Dordt began to look and act more like a university than a college; the institution prioritized robust scholarship, excellence in teaching, and increased opportunities for students and faculty to collaborate. In addition to a diverse array of traditional undergraduate programs, Dordt's academic offerings began to include online studies, graduate programs, and professional-technical associate degrees. Students came from more than 26 countries to study at Dordt, and alumni lived all over the world. In May 2018, the Board of Trustees and Dr. Erik Hoekstra announced that Dordt would become known as Dordt University. The transition to Dordt University officially took place on May 13, 2019.

Policy of Nondiscrimination

The commitment of Dordt University to nondiscrimination on the basis of age, color, disability, gender, national or ethnic origin, or race in the administration of its admissions, education, and employment policies is consistent with the requirements of the Age Discrimination in Employment Act of 1967, Title VI of the Civil Rights Act of 1964, Title IX of the 1972 Education Amendments, Section 504 of the Vocational Rehabilitation Act of 1973, and the Iowa Civil Rights Act of 1965. Howard Wilson, Chief Administrative Officer, is the Title IX and Section 504 (Rehabilitation Act of 1973) Coordinator. He may be contacted regarding Title IX and Section 504 inquiries at 712-722-6007 or at howard.wilson@dordt.edu. Information regarding Title IX and Dordt University, along with a Title IX violation reporting form, may be found at www.dordt.edu/title-ix-report-form.

Accessibility for Students with Disabilities

Dordt University is committed to offering equal access to people with disabilities. The university has established the position of coordinator of services for students with disabilities (CSSD) in order to assist students with disabilities desiring to enroll at the university. A student with a disability should contact the coordinator approximately six months before the start of the semester of admission or as early as possible to ensure the accessibility of classrooms and housing and the availability of auxiliary aids. The student will be asked to provide appropriate documentation of the disability that is no more than three years old so that the current impact of the disability is addressed. The coordinator uses the documentation to develop an individual plan with each student, implementing necessary services and accommodations. Accommodations may not lower course standards or alter degree requirements but provide students with disabilities an equal opportunity to learn and demonstrate their abilities.

Certain facilities on campus are not fully accessible to people with disabilities, but Dordt University does adhere to the accessibility standards of Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 by ensuring the student's program and learning environment, when viewed in their entirety, are accessible to people with physical disabilities.

Accreditation

Dordt University is accredited by The Higher Learning Commission (HLC) as a four-year, bachelor degree granting institution. Dordt's HLC accreditation dates from 1971, with the most recent renewal in 2012. The university also gained HLC approval in 1994 to offer a graduate program leading to the master of education degree.

The Iowa Department of Education has approved Dordt's program of teacher preparation. Graduates of the Teacher Preparation Program are recommended for the first level of licensure granted by the state of Iowa. Approval has also been granted to offer a master of education degree.

The Dordt University social work program has been accredited since 1986 by the Council on Social Work Education.

The Dordt University engineering program has been accredited since 1991 by the Engineering Accreditation Commission of ABET, <http://www.abet.org>. The applied science and technology major and engineering science major have not been examined or accredited by ABET.

The Dordt University nursing major has been accredited since 2007 by the Commission on College Nursing Education (CCNE).

The university is also approved to train veterans under Public Law 550, war orphans under Public Law 634, and is authorized under Federal law to enroll non-immigrant students.

The Higher Learning Commission
30 North LaSalle Street, Suite 2400
Chicago, IL 60602-2504
Ph. (312) 263-0456
(800) 621-7440
Fax (312) 263-7462
www.ncacihc.org

State of Iowa
Board of Educational Examiners Licensure
Grimes State Office Building
Des Moines, IA 50319-0146
Ph. (515) 281-3245

Council on Social Work Education
1725 Duke Street, Suite 500
Alexandria, VA 22314
Ph. (703) 683-8080
Fax (703) 683-8099

ABET
111 Market Pl., Suite 1050
Baltimore, MD 21202
Ph. (410) 347-7700
Fax (410) 625-2238

Commission on Collegiate Nursing Education
One Dupont Circle NW, Suite 530
Washington, D.C. 20036-1120
Ph. (202) 887-6791
Fax (202) 887-8476
www.aacn.nche.edu

Campus Life

As a Christian institution, Dordt University strives to be a community of faculty and students committed to learning in the light of the Bible. The life of this community is social and academic, and in both areas all members of the Dordt University community seek to glorify God.

In accordance with the Christian aim of Dordt University, students are expected to express the Christian faith positively in their general conduct and lifestyle. It is not the purpose or intention of Dordt University to lay down minute regulations for the daily conduct of its students. By their applications for admission and their decision to attend Dordt University, students certify that they intend to live according to the Christian aims and policies of the university. Though admission to Dordt University is the rightful privilege of its constituency, that privilege may be readily withdrawn should the student fail to maintain proper standards of conduct or scholarship.

Students are expected to attend church services each Sunday. Students who are not able to attend their home church are asked to select one of the local churches as their church home.

All students are expected to attend chapel regularly, not out of compulsion, but out of recognition of the need for spiritual nourishment and refreshment. Chapel is held once a week to provide opportunity for students, faculty, and staff to join in meditation upon the Word of God.

Each school year begins with the university retreat at Lake Okoboji. This is followed throughout the year by Bible study groups, lecture series, mid-week praise and worship, residence hall devotions, etc. Recognizing the importance of spirituality as part of student life, the university also provides pastoral counseling for students. Members of the Student Services staff meet with and help students with questions and problems that may be troubling them. The university seeks to maintain and develop a vibrant spiritual climate on campus in the context of which the work of Christian scholarship may be effectively carried on.

Student Activities

Student Government Dordt University's Student Government consists of 16 students who represent the student body. Each of these students serves on a university committee and participates in the major decision-making processes of Dordt University. Student Government meets regularly to discuss issues that concern the Dordt University community.

Athletics Dordt University is a member of the National Association of Inter-collegiate Athletics (NAIA) and the Great Plains Athletic Conference (GPAC). As a member of the NAIA, Dordt University teams are eligible for post-season tournament play. Dordt plays a full schedule of games with colleges in Iowa, Nebraska, Minnesota, and South Dakota. Intercollegiate competition for men is scheduled in baseball, basketball, cross country, football, golf, soccer, track, and volleyball. Competition for women is scheduled in basketball, cross country, golf, soccer, softball, track, and volleyball.

Club Sports Students have organized a number of sports clubs that supplement the regular program; some allow for intercollegiate competition. Soccer, hockey, volleyball, men's and women's lacrosse, and wrestling are examples of the types of club sports that have been organized in previous years. Additional clubs may be organized as student interest demands. The club sports program is supervised by the Health and Human Performance Department.

Clubs A number of clubs are organized to provide outlets for students with special interests. Student groups apply for club status and club funding by submitting applications to Student Government. Examples of recent clubs include:

Actuarial Science Club	Future Physician's Club (Pre-Med Club)	Rugby Club
Agriculture Club	Institute of Electronic and Electrical Engineers (IEEE)	Round Net Club (Spikeball)
American Society of Civil Engineers (ASCE)	Illusionists	Science and Faith Club
American Society of Mechanical Engineers (ASME)	Juggling Club	Students Without Borders (Cross-Cultural Club)
A Mission OutReach (AMOR)	Lacrosse Club	Sunday Singing Club
Community Outreach Program (COP)	Magic: The Gathering	Swing Dance Club
Competitive Gaming Club	Math Club	Table Tennis Club
Concrete Canoe	Mu Kappa Club (Missionary Kid Club)	Trapshooting Club
Cycling Club	Nerf Club	Theology Club
Defender Capital Management Club	Pre-Law Club	University Democrats
D'Arte Club	Pre-Physical Therapy Club	University Republicans
Disc Golf Club	Pre-Ver Club	Wilderness Club
Future Active Christian Teachers (FACT)	Prison Ministries Club	Women's Ministry
Future Leaders and Missional Entrepreneurs (FLAME)	Psychology Club	Writing Club
	Putting Love Into Action (PLIA)	

Intramurals A year-round program of intramural sports gives all students an opportunity to take part in recreational activities. The intramural program is planned and supervised by the student intramural council. Recreation is provided through activities such as badminton, basketball, bowling, floor hockey, golf, racquetball, sand volleyball, soccer, softball, volleyball, and water sports.

Social/Cultural Activities The University schedules a variety of activities throughout the year. Students are encouraged to participate in campus events as an important part of university life.

In addition to previously listed activities, various groups plan a number of social events. Students are encouraged to attend the fine arts festivals, the university-sponsored First Mondays Speaker Series, the annual music festival, the Talent Extravaganza, the All-Campus Fiesta, the Cultural Fair, the All-Campus Block Party, or many of the other school activities organized by student representatives.

Drama Several theatrical productions are performed each year. All Dordt students have the opportunity to audition for the mainstage productions, be involved in student-directed one-acts, or work on senior student productions. Opportunities also include technical aspects of theatre.

Musical Activities Music majors and non-majors participate in a variety of ensemble, community, and church performances, in addition to those provided by Dordt ensembles. Instrumental and vocal ensembles welcome students of all ability levels.

Bella Voce—Membership is open by audition. The women's chorus presents several local concerts each year.

Campus-Community Band—All new students, as well as upperclassmen, may audition for membership in the Campus-Community Band, an organization that studies representative symphonic band literature and performs several local concerts each year.

Chamber Orchestra—The Chamber Orchestra consists of string players who study chamber music literature, perform several local concerts each year, and tour extensively. Membership is by audition.

Chorale—All new students, as well as upperclassmen, may audition for membership in the Chorale, a group that studies representative choral literature and performs several local concerts each year.

Concert Choir—Each year the Concert Choir presents a number of local concerts and tours extensively. Membership in the choir is open by audition.

Ensembles—Various small ensembles are organized each year to perform small ensemble literature. A variety of performance opportunities is available.

4th Avenue Band—Membership is by audition. Unless other arrangements are made, all players must also be members of the Campus-Community Band or Wind Symphony.

Northwest Iowa Symphony Orchestra—Chamber Orchestra members have automatic membership in this large full symphony orchestra; membership is open to wind and percussion students by audition. NISO performs three concerts each year.

Wind Symphony—Members, chosen by audition, study representative symphonic band literature, perform several local concerts each year, and tour extensively.

Student Publications

The Diamond, the university student newspaper, published on a biweekly basis.

The Signet, an annual student publication, issued in the summer.

The Canon, the creative literary publication in the arts.

Career Development Center

The Career Development Center encourages Dordt students and alumni in vocational and career development by equipping them with the tools necessary to find employment or enroll in graduate school as they work toward Christ-centered renewal. Offering critique services for résumés, LinkedIn profiles, cover letters, graduate school materials, and more, the Career Development Center also plans events and workshops including a seven-course dining etiquette meal and a job and internship fair throughout the academic year. On HireDefenders (www.hiredefenders.com), the Career Development Center staff posts full-time job and internship opportunities for both Dordt alumni and students. Find out more about the Career Development Center at www.dordt.edu/cdc.

Student Services

Campus Ministries Each week, a variety of worship venues are offered, including campus-wide chapel every Wednesday, Praise and Worship every Thursday, and alternating GIFT and LIFE worship services every Sunday. International and domestic short-term mission projects are offered over Christmas and spring break through programs like AMOR (A Mission OutReach) and PLIA (Putting Love Into Action). Pastoral care and guidance is always available. Plus, numerous opportunities for growth and learning are offered through Bible studies and small groups.

Counseling The Dordt University counselors seek to support students who are facing emotional and relational distress by providing quality mental health care from a Christian perspective. The counselors' goal is to help students be successful in life, in their relationships, and in their callings. Dordt's licensed therapists strive to provide services with respect for the unique needs of each client in a safe, confidential environment, seeking to glorify God in all that they do. Appointments can be made by contacting Campus Health Services by calling extension 6990 or sending an email to counseling@dordt.edu. Referral services to off-campus agencies are also available through the counseling staff.

Student Health Student Health provides on-campus health care for all full-time Dordt University students. It is available for ill visits, minor injuries, first aid, immunization records, prescriptions for medication refills, medical information, and referrals. A registered nurse is on staff daily to care for students. A nurse practitioner is available for a limited number of hours each week. The office is open Monday through Friday. Students may use walk-in services from 9 a.m.-noon or call extension 6990 to schedule an appointment between 12:30-3 p.m. Visits are free of charge. A fee is incurred for immunizations, purchase of medications, or when the services of an outside laboratory are utilized.

Housing

All unmarried students who are not 22 years old by September 1, 2019, are required to live in Dordt University housing unless they live at home with a parent or guardian. Students must be 17 years of age by August 1 of the current academic year to be eligible

for Dordt University housing. Those students who wish to live with other relatives must receive approval from the Dean of Students prior to making other arrangements for housing. The Student Life Committee may grant exceptions to this general policy where circumstances make it advisable. All requests for exceptions must be presented in writing to the Dean of Students prior to the academic year. Mid-year requests will not be considered unless extenuating circumstances exist. Dordt/St. Luke's students in their first and second years in the St. Luke's program are considered full-time students with regard to the residency policy.

Rooms for incoming freshmen and transfer students are reserved in advance upon receipt of the \$200 enrollment deposit that all first-time students must pay. Rooms for returning upperclassmen are reserved in advance upon receipt of a \$150 security/damage deposit. These deposits are non-refundable and non-transferable. The security deposit will be refunded or credited to a student's account in August 2020 if no fines have been levied, such as parking, overdue library books, room damage, and there are no outstanding bills such as tuition due the university.

While the university is responsible for housing all unmarried students, such students do have a measure of choice in regard to roommates. However, the university reserves the right to make housing adjustments when necessary. Married students are expected to make their own housing arrangements. Information about available apartments for married students can be obtained from Student Services.

Housing Regulations Rooms are furnished with beds, mattresses, desks, chairs, and dressers. Students provide their own bedding and bath supplies. All residence halls are equipped with network and wireless Internet connections in individual rooms. Computers and telephones are not provided.

All students who apply for a room and pay the security/damage deposit are obligated to residency in university housing while in attendance at Dordt. Room contracts terminate at 8 a.m. on Wednesday, December 18, 2019, at the end of the fall semester and at 1 p.m. on Friday, May 8, 2020, at the end of the spring semester. Students must be out of their residence by that time. Graduating seniors must be out of their residence by 7 p.m. on Saturday, May 9, 2020.

The charges set by the university do not include Christmas and spring vacation periods, when the dining hall and the residence halls are closed. The university encourages students to either go home or to a friend's home during these vacation periods. Students who do not live in or near Sioux Center may make arrangements to pay an extra fee to stay in university housing over break.

Rooms of students in any university owned residence are open for university inspection at any time. The student is held responsible for any damage to his or her room, residence complex, or furnishings. Each residence hall is under the supervision of an area coordinator and resident assistants. Students are responsible to the residence life staff, and they are expected to abide by all university-determined housing regulations in addition to those listed in this catalog. For a more complete statement of policies regarding student housing and student conduct, see the student handbook, <https://www.dordt.edu/student-life/student-handbook>.

Meals All first and second year students and students living in non-apartment-styled residences are required to have a meal plan through the university food service unless exempted by the university. Regular cooking is not permitted in the university residence halls. All students living in apartment-styled residences with cooking facilities are required to have a five meal per week meal plan through the university food service unless exempted by the university.

Admissions

Associate of Arts and Bachelors Admission

Dordt University seeks applicants who want to attend a Christian university and who have demonstrated the desire to learn. All students exhibiting these characteristics will be considered for admission. Previous academic experience is a large, but not the only, factor in evaluating applications.

Regular Admission Applicants are normally granted regular admission status if their academic record demonstrates the following:

1. A minimum of 17 units of high school credit. A subject pursued for one school year of 36 weeks with five class periods per week is considered one unit. At least 10 units must be from the subjects listed under the "recommended high school program" below.
2. A college-preparatory course of study with:
 - English, a minimum of three years
 - Mathematics (algebra and/or geometry), a minimum of two years
 - Foreign language, two years in a single language with grades no lower than C in the second year. International and English as a Second Language (ESL) students meet this requirement if they receive a passing score on the Entrance Interview.
3. A cumulative high school GPA of 2.25

4. ACT or SAT I test score as follows:				
ACT:	English - 18	Math - 18		Composite - 19
SAT I:	Three-Part Test			
	Critical Reading - 460	Math - 460	Writing - 460	Composite - 1380
SAT I:	Two-Part Test			
	Reading/Writing - 500	Math - 500		Composite - 1010

Admission with Special Provision Applicants with incomplete admissions records or applicants with high school records or test scores that do not meet all regular admission standards may be granted admission with special provision. In the case of incomplete records, receipt of the complete record may result in a change of admission status. Students who were unable to take the ACT or SAT I prior to enrollment will be required to take the ACT after arrival on campus. The results of this test may affect the student's status.

All students admitted who have not had at least two years of high school foreign language will be required to study foreign language at the 100-level at Dordt.

Students admitted who do not meet the specified score on the ACT or SAT I test will be required to take additional preparatory courses either during the summer prior to the freshman year or during freshman year. These courses give the necessary background in English and mathematics to do college-level work. (See page 107 for English 100; see page 123 for Mathematics 100.)

Students who are admitted with a high school GPA below 2.25 or a composite ACT score below 19 (SAT I combined score below 1380 for the three-part test or 1010 for the two-part test) will be admitted to Dordt through the Aspire Program. This program includes diagnostic testing, academic counseling, and other services designed to help students adjust to university life. (See page 13 for the Aspire Program.)

Applicants being considered for admission with composites below our standards for regular admission or low English ACT or SAT scores may be required to write an essay for the Provisional Admissions Committee.

Other background deficiencies, not specifically listed here, will be handled on a case-by-case basis.

Recommended High School Program The courses and programs that students select in high school will affect how well they adjust to college work. Ideally, they should take the following:

English/Language Arts4 years

Mathematics.....3 years

One year of algebra, one year of geometry, one year of advanced algebra or advanced mathematics; four years of mathematics are recommended for students considering majors in mathematics, computer science, engineering, physics, or other science programs.

Science.....3 years

Including biology, chemistry, or physics; nursing and agriculture students should take chemistry; four years of science is recommended for students considering majors in science. Students considering engineering should take both chemistry and physics.

Social Science.....2 years Foreign Language 2 years

Three or more years of a single foreign language, with grades no lower than C in the final year of study, may satisfy Dordt's cross-cultural requirement, provided that the student can show evidence of an appropriate cross-cultural experience. (See page 26, Cross-Cultural Studies.)

Electives4 years

College preparatory courses from areas listed above.

Making Application Application for admission should be made well in advance of the semester a student wishes to enter Dordt University. To make a formal application for admission, candidates are requested to go to www.dordt.edu and fill out the online application or write to the executive director of admissions requesting application forms.

Students will be considered for admission after they have submitted the following official forms:

1. Application for admission
2. Transcript of high school record
3. ACT or SAT results

Accepted students are to pay a \$200 enrollment deposit within 21 days of the acceptance date. The enrollment deposit serves as a declaration of intent to enroll and reserves housing. If requested in writing, it is refundable until May 1. This enrollment deposit becomes the student's security deposit when fully enrolled. This deposit will be refunded when the student terminates attendance at Dordt if no fines have been levied, such as overdue library books, room damage, and no outstanding bills, such as tuition, are due to the university.

Entrance Test Applicants for admission are also required to submit the results of the ACT or SAT. Applicants who are not able to take the ACT or SAT may be considered for admission but will be required to take the ACT after enrollment.

Notification of Admission As soon as the required forms have been received the office of admissions will evaluate them. Admission will be granted as follows:

General Admission– Students whose records indicate that they are able to pursue college work are granted general admission.

Admission with Special Provision– Students whose records indicate that they might have serious difficulty pursuing college work or who have not met all admission requirements are granted special admission.

Associate of Science Admission (Professional-Technical Education)

The Professional-Technical Education (Pro-Tech) Program offers a two-year associate of science degree in Agriculture: Farm Operations and Management and Manufacturing Engineering Technology. There are a limited number of openings in each Pro-Tech major, so it is important for students to apply early.

Regular Admission To be considered for regular admission status to Pro-Tech, an applicant's academic record must demonstrate the following:

1. A minimum of 17 units of high school credit. A subject pursued for one school year of 36 weeks with five class periods per week is considered one unit. At least 10 units must be from the subjects listed under the "recommended high school program" below.
2. A college-preparatory course of study with:
 - English, a minimum of three years
 - Mathematics (algebra and/or geometry), a minimum of two years
 - Foreign language, completion of one year (two years strongly recommended) of a single language with a grade no lower than a C. International and English as a Second Language (ESL) students meet this requirement if they receive a passing score on the Entrance Interview.
3. A cumulative high school GPA of 2.25

Admission with Special Provision Students who do not meet the minimum academic requirements for admission to Pro-Tech may be granted admission with special provisions if warranted by the student's total academic record and program-related experience. Special admission may require diagnostic testing, academic counseling, and other services designed to help students adjust to university life.

Recommended High School Program The courses and programs that students select in high school will affect how well they adjust to university work. Ideally, they should take the following:

- Career and Technical Education2 years
Including courses in agriculture, industrial technology, business, and related disciplines.
- English/Language Arts4 years
- Mathematics3 years
One year of algebra, one year of geometry, one year of advanced algebra or advanced mathematics.
- Science2 years
Including biology, chemistry, or physics.
- Social Science2 years
- Foreign Language1 year
Two years strongly recommended.
- Electives4 years
College preparatory courses from areas listed above.

Making Application Students will be considered for admission after the following items have been received:

1. Application for admission
2. Official high school transcript

Transfer Admission

Students who have attended another accredited institution of collegiate rank may be considered for admission with advanced standing. Academic credits presented by transfer students will be evaluated in terms of the quality of the student's work and the relationship of the subject matter to the Dordt curriculum. A minimum grade of C is required in each course to receive credit.

Students who plan to transfer to Dordt University are encouraged to contact the registrar as soon as possible so that course plan-

ning may take place and optimal use of courses and credits will occur. A maximum of 30 semester hours of credit (two semesters) may be granted for CLEP, AP, International Baccalaureate (IB) higher-level exams, Cambridge A-level exams, or other college level courses earned prior to receiving a high school diploma. A maximum of 61 semester hours of academic credit (four semesters) is granted to graduates of community colleges. (See also page 40, Residence Requirement.) The registrar evaluates transfer credits. Admission to advanced standing does not exempt a student from meeting the specified requirements for graduation from Dordt University.

After application materials have been evaluated, students will receive notification of credits accepted, student classification, and academic status. Student classification and academic status are assigned following the policies governing all students at Dordt University.

Regular General Admission The director of admissions determines regular general admission for transfer students after the following items have been received:

1. A completed Dordt University application for admission
2. An official high school transcript
3. An official college transcript. Transfer candidates must request that the registrar at each collegiate institution attended forward an official transcript; transcripts submitted by the candidate are not acceptable. The college transcript must show a cumulative GPA of 2.00 or above for regular general admission.
4. ACT or SAT results

Admission with Special Provision Students who do not meet the minimum academic requirements for admission may be granted admission with special provisions if warranted by the total academic record of the student. Special admission may require the following:

1. A contract approved by the academic enrichment center director that may include developmental courses or workshops.
2. A limit of 15 credits for the first semester of attendance.
3. A minimum GPA requirement for the first two semesters of attendance.

Approval for and status of admission is decided by the Provisional Admissions Committee.

International Student Admission

In addition to meeting the requirements in the appropriate admissions section of the catalog, international students must display two levels of English proficiency - one for admission and one for course placement in the first semester of study.

Proficiency for Admission This proficiency level can be met in two ways:

1. A standardized English proficiency exam.
 - TOEFL (iBT) of 79
 - IELTS of 6.5
 - TOEFL (PBT) of 550
2. Documented evidence of English as the primary language of instruction for seven consecutive years, and ACT or SAT scores which demonstrate a mastery of the English language.

Proficiency to Waive English for Academic Purposes Coursework This proficiency level can be met in two ways:

1. High school degree completion from an accredited English speaking Canadian, Irish, British, Australian, New Zealand, or U.S. educational system.
2. A passing score on Dordt University's Entrance Interview for International Students (EIIS), an exam conducted during International Student Orientation.

All non-U.S. and non-Canadian students are required to attend International Student Orientation, which takes place Wednesday-Friday, August 21-23, 2019, immediately prior to freshman orientation days. ISO creates an opportunity for international students to experience fellowship, establish friendships, and gain successful entrance to the Dordt University community. U.S. and Canadian citizens living abroad are welcome to attend ISO with prior approval from the Global Education office. Students attending ISO must participate in every scheduled event.

Special Students

Students who do not plan to follow a prescribed course of study leading to a degree may register as special students for courses they wish to pursue on the basis of their qualifications. Permission to register as a special student must be obtained from the registrar.

Freshman Orientation

The freshman orientation program introduces incoming freshman to the Dordt University community and informs them about everything they need to know to succeed, including information on goal-setting, self-assessment, advising, campus life, learning skills and abilities, institutional expectations, available resources, and building community. In addition to Week of Welcome at the beginning of the fall semester, freshman orientation includes peer counseling and targeted academic skills support during the first semester. Freshman students must plan to arrive on campus on Saturday, August 24, 2019, for the freshman orientation program.

Readmission

Former students who seek readmission must initially contact the office of admission. Students who have been away from college for more than one semester must meet the requirements stated in the current catalog.

Academic Support Services

Aspire Program The Aspire Program provides an opportunity for motivated students, who have the potential to be successful at Dordt but do not meet the regular admission standards, to benefit from a Dordt education. Inclusion in the program is determined by the Provisional Admissions Committee and is based on high school grades, courses, and ACT/SAT scores. A personal essay may also be requested and be considered by the committee in making its decision.

Students admitted to the Aspire Program are offered the following aids to academic success:

- a mandatory one-day *Aspire Program Orientation* immediately preceding the Week of Welcome for incoming freshmen
- automatic enrollment in the *Essential Strategies for Academic Success* seminar
- a maximum of 12-15 credits in the first semester (including credits for athletics, music ensembles and lessons, or involvement in theatre arts)
- assessment in reading and learning skills during orientation
- *Campus Toolkit*, an interactive web-based resource for students which provides help 24/7 on concerns common for college students
- an individualized academic success contract
- weekly conferences with an academic coach, either an Academic Enrichment Center professional or a learning community assistant
- tutorial assistance
- placement in one or more university competency courses for students whose ACT/SAT scores in English/Writing and/or Mathematics are below the 18/500 required for general admission

Students with Special Needs Dordt University makes available academic support for students with special learning needs such as sensory impairments, physical and health problems, and learning disabilities. For more information contact the Coordinator of Services for Students with Disabilities (CSSD).

Students who believe that they need academic support should notify the CSSD as soon as possible. Ideally, this should occur during the application process. Accepted applicants will be asked to provide relevant assessment information so that appropriate academic support can be planned. If prior assessment information is not available or is more than three years old, the applicant will be encouraged to have such an assessment done. This type of assessment can usually be obtained in the student's school district, at no cost, if the student is currently enrolled in a K-12 school. Once applicants are moved to student, those seeking accommodations will need to submit the Student Accommodations Request (SAR) form to the office of the CSSD.

Current students enrolled at Dordt University can request academic accommodations also. They will be asked to provide assessment information that confirms the existence of the special need, such as a learning disability and to submit a completed SAR form to the CSSD. The student will be encouraged to have appropriate assessment performed if assessment information is not available.

Finances

Expenses

The cost of attending Dordt University is kept as reasonable as possible. Tuition covers only a part of the cost of education. Each student receives the benefit of finances obtained from individual gifts, church offerings, and denominational ministry shares.

Tuition for Associate of Arts and Bachelors	Per Semester	Per Year
Full time	\$15,605	\$31,210
Part time, per credit*		1,310
Overload fee per credit over 18.5 credits per semester		500
Summer tuition rate, per credit (1-6)		330
On-line part-time, per credit (1-8)		330
Auditing, per credit		250
Visitor, per credit		50

*Students taking 8 credits or less may be eligible for a part-time learner grant. Aid for students above 8 credits to be determined by financial aid.

Tuition for Associate of Science (Professional/Technical Education)		
Full time	6,355	12,710
Part time, per credit		530

Room and Board	Per Semester	Per Year
Residence hall room (semi-private) with value meal plan	5,010	10,020
Residence hall room (semi-private) with reduced meal plan	4,875	9,750
Apartment-style residence (5 meal plan required)	3,320	6,640
5 meal plan (required for students in apartment-style residences)	590	1,180

All room and board plans at Dordt University include the Defender Dollar flexible spending account that can be used at any on-campus dining location. Residence hall rooms include a \$100 per semester Defender Dollar account, and apartment-style residences include a \$200 per semester allocation.

Fees	Per Semester	Per Year
Student activity fee*	280	560
Enrollment deposit**		200
Aspire program fee		100
Off-campus program administrative fee	280	
Music lessons, individual***	420	
Music lessons, group***	210	
Service charge for returned checks		
U.S. checks		30
Canadian checks		40

***Activity Fee** Items included: athletic events, co-curricular activities, game room, intramurals, access to student health services, movies, music rentals (tux, formals, instruments), placement fee, yearbook, student teaching, technology fee, transcripts, vehicle registration, recreation complex use, and access to the All-Seasons Center.

****Enrollment Deposit** All students who register for the first time at Dordt must pay an enrollment deposit. This deposit serves as a declaration of intent to enroll and reserves housing. If requested in writing, it is refundable until May 1. This enrollment deposit becomes the student's security deposit when enrolled. The security deposit will be refunded when the student terminates attendance at Dordt University if no fines have been levied, such as parking, overdue library books, room damage, and no outstanding bills, such as tuition, are due to the university.

*****Music Lessons** The following students qualify for individual lessons priced at half the normal fee*:

- music majors who have successfully completed 54 credits and passed Music 203
- music performance minors who have completed four discrete semesters of lessons

**Half fees do not apply to group lessons or piano proficiency lessons.*

Payment of Accounts Charges for tuition, room and board, and fees are due and payable the first day classes begin for each semester. A finance charge of .75 percent per month (9 percent annual percentage rate, accrued monthly) is charged on all unpaid accounts. A payment plan is offered each semester for the convenience of students and parents wishing to pay their university expenses in installments. For more information, see <https://www.dordt.edu/tuition-payment>.

Students may not register for a new academic term if their account balance is not paid in full. The university will withhold diplomas, transcripts, and grade reports until accounts are paid in full.

Related Expenses When determining the amount of financial assistance necessary, Dordt University includes the average cost of books, travel, and personal expenses. Depending on the student's grade level and chosen major, the cost of books ranges from \$600 to \$1,140 per year. Travel expenses vary from \$500 to \$2,400, depending on the number of times the student goes home, the distance of the student's home from the university, and the mode of transportation used. Personal expenses range from \$700 to \$2,100, depending on the student's lifestyle.

Part-Time Adult Learner Program Dordt University has established a special financial aid program for the adult learner. To be eligible for the program, students must be 25 years old prior to the first day of classes and classified as a part-time student. This program is not available to persons who have attained a bachelor's degree. The adult learner must not have taken a college course in the last 10 years. The Financial Aid for Part-Time Students/Adult Learner Students Form must be completed.

Students eligible to participate in the Adult Learner Program receive their first course at no cost. Per credit charges for subsequent classes are at the regular part-time student rate with the applicable part-time learner grant if taking eight credits or fewer per semester. Adult learners may also be eligible for state or federal loans and financial aid. Students should consult admissions to determine eligibility for the program and consult the registrar for evaluation of transfer credit.

Student Medical Insurance All international students, except those from Canada, are required to purchase medical insurance. Additional information is available from the director of international programs.

Refund/Repayment Policy If a student drops courses during the add/drop period determined by the Registrar's Office, the student receives a full refund with no academic record of those classes. If a student completely terminates enrollment (i.e., cancels his/her registration, withdraws, or is dismissed) during the semester, the student's refundable charges and financial aid will be prorated if the student has been enrolled for 60 percent of the semester or less. If a student has been enrolled for more than 60 percent of the semester, the student is not eligible for a reduction in charges. The following costs are refundable by the terms of this policy: tuition, room, board, and student activity fee. Credits provided for the Defender Dollar program and all other charges are nonrefundable.

The withdrawal date is the later of (1) the date the student begins the withdrawal process by providing official notification (oral or written) of the intent to withdraw; or (2) the student's last date of attendance at an academically related activity. A student who wishes to withdraw must contact the Office of Student Services to initiate and complete the appropriate paperwork. In the case of a withdrawal, the class will be listed as a "W" on the student's Dordt University transcript.

The percentage of the semester completed is calculated by dividing the number of days enrolled by the number of calendar days in the semester, including weekends and holidays, but excluding breaks of five or more consecutive days. For example, if there are 107 calendar days in a semester and a student's withdrawal date is on the 50th day, the student's refundable charges and financial aid will be prorated to reflect enrollment for 46.7 percent of the semester (50 days divided by 107 days). This refund/repayment policy is based upon federal guidelines.

Recipients of Federal Title IV Financial Aid If the withdrawing student is a recipient of Federal Title IV financial aid, the amount of Title IV assistance the student earned must be compared with the amount disbursed.

The amount of Title IV assistance earned is calculated as follows: Percentage of Title IV financial aid earned (percentage of semester completed) multiplied by the amount of Title IV aid disbursed (or that could have been disbursed) as of the withdrawal date equals amount of Title IV funds earned.

If the withdrawing student received less Title IV financial aid than the amount earned, the university will make a post-withdrawal disbursement as specified by the Department of Education.

If the withdrawing student received more Title IV financial aid than the amount earned, the university, or the student, or both, must return the unearned funds, as required, in the following order: Unsubsidized Stafford Loan, Subsidized Stafford Loan, Perkins Loan, PLUS Loan, Pell Grant, SEOG Grant, and LEAP funds.

If the student is required to return federal grant funds, the student will have 45 days from the date of notification to pay the amount in full or to make satisfactory arrangements for repayment with the university or the Department of Education. Failure to repay or make arrangements within this time will result in a loss of eligibility for all federal aid for attendance at any college until amount is paid in full.

When a student withdraws, a copy of worksheets, showing details of the required treatment of Title IV funds, and examples of the application of withdrawal refund/repayment policy are available upon request.

Financial Aid

In addition to the extensive scholarship program that is based on superior academic potential and performance, Dordt University has a complete program of financial assistance for students demonstrating financial need. Types of financial assistance available include grants, loans, work, and other special programs outlined below.

At Dordt, 98 percent of the student body receives some type of financial aid. Regardless of income, the only way for a student to know if they qualify for financial aid is to apply. All United States citizens who wish to apply for financial aid must submit the Free Application for Federal Student Aid (FAFSA). We also highly encourage completion of the Dordt University Supplemental Data Form. Additional information may be requested from the student during the financial aid process. All Canadian students who wish to apply for financial aid must submit the Dordt University Canadian Financial Aid Form. All necessary forms may be found by checking online or by contacting the Dordt University Financial Aid Office.

Dordt University Grants Dordt University makes grants available to students in the following groups. In most cases, no financial aid application is necessary.

Alumni Grant This grant is available to students attending full time whose mother and/or father are alumni (attended Dordt the equivalent of at least two semesters full time).

Canadian Grant Dordt University provides a grant to Canadian students in an effort to make Dordt more affordable. For all other expenses (books, personal spending, etc.) students may exchange money through the Business Office at the current university exchange rate.

Distance Grant Full-time students may be eligible for this grant, which is based on the student's state of legal residence. Two semesters of continuous local residence will change the distance grant status unless the student regularly returns to his or her former residence for summer employment or continues to be legally dependent on his or her parents.

Institutional Grant All full-time students who are members of supporting churches and denominations or who are graduates of Christian high schools receive this annual grant.

International Tuition Grant Students from countries other than the United States and Canada may be eligible to receive this grant from Dordt University to help defray costs. The Foreign Student Financial Aid Application must be completed in order to determine need and be considered for this grant.

Siblings Grant This grant is awarded to full-time students from families with multiple children attending Dordt University in a given academic year.

Grants

Federal Pell Grant The Federal Pell Grant Program makes funds available to the most needy students. Grants range from \$657 to \$6,195 and application is made by completing the FAFSA. This program is available to United States citizens.

Federal Supplemental Educational Opportunity Grant The purpose of this program is to provide non-repayable grants to students who would not be able to attend college without such assistance because of exceptional financial need on the part of their family. Grants range from \$500 to \$1,500 per year. This program is available to United States citizens.

Heritage 21 Grant This grant is provided by the university to all students, regardless of citizenship, who have financial need that cannot be met with other grant programs. Grants range from \$200 to \$6,000 per year.

Century Need-Based Scholarship This aid is a combination grant/scholarship program. Two criteria must be met: good grades and financial need. This scholarship ranges from \$200 to \$2,000. Because of limited funds under this program, the money will be disbursed very selectively. Not every good student with high need will receive these funds.

Loans

Heritage 21 Loan This loan is provided by the university to all students with need, regardless of citizenship. No interest is charged while the student is enrolled as a full-time student at Dordt University or at another recognized college or university. Interest and principal payments will begin four months after the last month of attendance at Dordt or at another recognized college or university, with a maximum deferment of five years allowed for attendance at another institution. Interest rates on funds borrowed will vary according to the number of years of study completed at Dordt. For a student who has completed four years of study the interest will be three percent; three years, four percent; two years, five percent; and one year, seven percent. All loans must be repaid within 10 years from the time of the last month of attendance as described above. Minimum payments will be \$50 per month and will be payable to the business office at Dordt University.

Federal Direct Stafford Loan (Subsidized) Allows students who demonstrate federal financial need and who are enrolled for at least six credits each term to borrow up to \$3,500 for the first year of undergraduate study, \$4,500 for the second year, and \$5,500 per year for subsequent undergraduate study. Interest rates are determined on July 1 for the upcoming school year. An origination fee will be deducted from the loan amount before the funds are applied to a student's account. Repayment does not begin on subsidized Direct Loans until termination of college enrollment on at least a half-time basis. Interest accrued during the in-school period is paid by the federal government. The standard repayment period is up to 10 years. New borrowers must complete a Federal Direct Loan electronic master promissory note and complete an online Entrance Counseling Session to borrow funds through this program.

Federal Direct Stafford Loan (Unsubsidized) Allows all students regardless of federal financial need and who are enrolled for at least six credits per term to borrow up to \$5,500 for the first year of undergraduate study, \$6,500 for the second year, and \$7,500 per year for subsequent undergraduate study less the amount of any subsidized Direct Loan received by the student. New borrowers must complete a Federal Direct Loan electronic master promissory note to borrow funds through this program. Interest rates are determined on July 1 for the upcoming school year. An origination fee will be deducted from the loan amount before the funds are applied to a student's account. Interest accrual begins immediately during in-school and deferment periods. Interest accruing during these periods may be paid or capitalized. Independent students may borrow up to an additional \$4,000 per year for the first and second years of undergraduate study and up to an additional \$5,000 per year for subsequent undergraduate study through the unsubsidized Direct Loan Program. Dependent students may borrow up to the same additional amounts through this program but only if the student's parent is denied eligibility to borrow funds through the Federal PLUS Loan Program.

Federal Direct PLUS Loan Allows parents of dependent students to apply for as much as the difference between the cost of attendance and the student's financial aid. This loan is not need based, but the parent's credit history may be reviewed to determine eligibility. Interest rates are determined on July 1 for the upcoming school year. An origination fee will be deducted from the loan amount before the funds are applied to a student's account. The PLUS loan should be used only after all other resources have been considered since interest begins 60 days after the first disbursement. Repayment normally begins 60 days after disbursement of the full amount borrowed for an academic year.

Private/Alternative Loans Students who find they still need additional financial aid after other aid has been applied, or students whose families do not demonstrate need, may find an alternative loan a viable option. Many private loans are available with

varying terms and conditions varying. Most do require proof of credit worthiness. You may wish to contact your local lender to see if they participate in a private or alternative loan program.

Canada Student Loan The provincial governments have loan programs that may be used by Dordt students. Information and application forms may be secured through your high school or local bank or by writing to your home province department of education. Contact information as follows.

<p>ALBERTA Student Aid Alberta Service Centre PO Box 28000, Station Main Edmonton, Alberta T5J 4R4 Telephone: 780-427-3722 or 1-855-606-2096 Fax: 780-422-4516 studentaid.alberta.ca/</p>	<p>NEWFOUNDLAND Dept. of Adv. Education, Skills & Labour PO Box 8700 St. John's, Newfoundland A1B 4J6 Telephone: 709-729-5849 or 1-888-657-0800 Fax: 709-729-2298 aesl.gov.nl.ca/studentaid</p>	<p>PRINCE EDWARD ISLAND Student Financial Services Dept. of Innovation & Advanced Learning 176 Great George St PO Box 2000 Charlottetown, Prince Edward Island C1A 7N8 Telephone: 902-368-4640 Fax: 902-368-6144 studentloan.pe.ca/</p>
<p>BRITISH COLUMBIA Ministry of Advanced Education StudentAid BC PO Box 9180, Stn Prov Gov't Victoria, British Columbia V8W 9H9 Telephone: 1-800-561-1818 Fax: 250-356-9455 studentaidbc.ca/</p>	<p>NOVA SCOTIA Department of Education Student Assistance Office PO Box 2290, Halifax Central Halifax, Nova Scotia B3J 3C8 Telephone: 902-424-8420 or 1-800-565-8420 Fax: 902-424-0540 novascotia.ca/studentassistance</p>	<p>SASKATCHEWAN Student Service Centre Student Services & Program Development Branch 1120-2010 12th Ave Regina, Saskatchewan S4P 0M3 Telephone: 1-800-597-8278 Fax: 306-787-1608 saskatchewan.ca/</p>
<p>MANITOBA Manitoba Student Aid 401-1181 Portage Ave Winnipeg, Manitoba R3G 0T3 Telephone: 204-945-6321 or 1-800-204-1685 Fax: 204-948-3421 edu.gov.mb.ca/</p>	<p>ONTARIO Student Financial Assistance Branch Ministry of Training, Colleges and Universities PO Box 4500, 189 Red River Road, 4th Floor Thunder Bay, Ontario P7B 6G9 Telephone: 807-343-7260 or 1-877-672-7411 Fax: 807-343-7278 osap.gov.on.ca</p>	

Student Employment

Work-Study Program Dordt University participates in the Federal Work-Study Program that creates part-time job opportunities for students with financial need. Students qualify for participation in the Work-Study Program if they are: 1) United States citizens; 2) able to meet job qualifications; 3) in need of financial aid; 4) capable of doing good academic work in college; and 5) accepted for admission as full-time students in good academic standing. Students with required skills and experiences may qualify for jobs in the following fields: clerical assistant; library assistant; custodial work; instructional assistant; dining hall assistant; agricultural help; and other miscellaneous campus positions. Student employment applications are due June 1.

Work for Institution Program On-campus employment is also available for students that do not qualify for the federal Work-Study Program but have need for employment to assist with paying for college expenses. Student employment applications are due June 1.

Special Programs

Veterans' Education Benefits Dordt University is approved to offer education to students who are eligible for benefits under the terms of the Veterans' Post 9/11 GI Bill. Eligible students should write to their regional Veterans' Administration Office to obtain the application information. Dordt University also participates in the Yellow Ribbon Program.

For students utilizing the GI Bill, Dordt University will not impose any penalty including: 1) the assessment of late fees; 2) the denial of access to classes, libraries or other institutional facilities and /or 3) the requirements that a Chapter 31 or Chapter 33 recipient borrow additional funds to cover the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement of a payment by the U.S. Department of Veterans Affairs.

Vocational Rehabilitation Benefits Students who, by reason of physical disabilities, are eligible for benefits under vocational rehabilitation programs should write to the Division of Rehabilitation Education and Service in their state.

State of Iowa Tuition Grant Program The Iowa Legislature has established a state tuition grant program for the benefit of Iowa residents attending private colleges within the state. These grants are based on financial need and may be used only for educational expenses. (Application is made by filing the FAFSA.)

Scholarship and Loan Programs—Other States Several states have scholarships or loan programs that may be used at Dordt University. Information on such programs may be obtained from high school counselors.

Eligibility for Financial Aid

All freshmen and transfer students who are admitted to Dordt University in good academic standing are eligible for financial aid. Continued eligibility for financial aid is dependent on good academic standing and satisfactory progress toward graduation. Eligibility is monitored at the end of each semester. If either good academic standing or satisfactory progress toward graduation is not attained, a student may be limited to one more semester of financial aid. However, a student who receives less than a 1.00 GPA in any given semester is subject to suspension.

Likewise, students who are admitted on academic probation, including students readmitted after a period of academic suspension, will be limited to one semester of financial aid. Students so limited may receive additional semesters of financial aid if they make satisfactory progress toward graduation and meet a minimum semester GPA specified by the Financial Aid Office.

Academic Standing A student is expected to maintain a minimum cumulative GPA of 2.00 to graduate. Students needing extra assistance in the form of individual tutors, study skills, time management, etc. should contact the staff of the Academic Enrichment Center, located in the lower level of the library. Students will be notified when they are not meeting the graduation minimum and will be expected to seek the necessary assistance. For a description of the various academic standings shown below, see the Academic Policies section of the catalog (page 37). Academic standing is determined by the following:

	Academic Alert	Academic Probation	Academic Suspension
Total Credits Earned	Cumulative GPA is below	Cumulative GPA is below	Cumulative GPA is below
0 to 24	2.00	1.60	1.00
24 to 54	2.00	1.80	1.40
54 to 84	—	2.00	1.60
84 or more	—	2.00	1.80

Satisfactory Academic Progress Federal regulations require that students maintain satisfactory progress in order to continue to receive financial aid. Dordt University also requires satisfactory progress for most institutionally controlled financial aid. Poor grades can impinge on a student's financial resources.

Satisfactory progress toward graduation is defined in terms of successfully completing 66.7 percent of the credits for which a student is enrolled in a given semester. The minimum percentage of successful completion is calculated by dividing the number of successfully completed hours (i.e., those with a grade of A, B, C, D, or P) by the sum of cumulative hours enrolled (including those courses with W or F grades and late grades) and multiplying that number by 100.

A student's financial aid will be terminated if they have reached 150 percent of the number of credits necessary to complete their degree. This regulation applies to all students. For example, a student working toward their Bachelor's degree at Dordt University is required to complete 124 credits to graduate. Once the student has attempted 186 credits (124 credits x 150 percent) they will no longer be eligible for financial aid.

The 150 percent rule also applies to students who transfer in credits from another institution. Progress will be monitored from the point he or she begins at Dordt. For example, if a student were to transfer to Dordt with 40 credits, they would need an additional 84 credits to receive their degree. They would be eligible to receive financial aid for up to 126 credits (84 x 150 percent). Beyond this point the student would be responsible to make other arrangements to pay their tuition and fees.

If a student loses financial aid eligibility due to consecutive semesters of not making satisfactory progress, the Financial Aid Office will notify the student in writing of the specific procedures and minimum requirements necessary for reinstatement of his or her financial aid for the next semester. In some instances a student (if allowed to remain in school by the academic standing committee) will receive no financial aid for a semester until grades can prove that once again the student is making satisfactory academic progress. There may also be a situation where a student is in good academic standing or on academic probation, but will not meet the criteria for financial aid (i.e., a student who received three A's and two F's will not meet the 66.7 percent completion requirement even with a cumulative GPA of 2.40 and being considered in good academic standing).

Students may appeal the loss of financial aid to the director of financial aid when there are special circumstances such as illness or death in the family. The director may grant the appeal after consultation with at least two other staff members from the Admissions, Student Services, or Academic Offices. Students should be aware that only truly extraordinary circumstances will be considered. Appeal requests must be in writing and must include a statement from a member of the Admissions, Student Services, or Academic Affairs Office, or a faculty advisor. The written appeal documents will be kept in the student's financial aid file. Should an appeal be granted, the student will be allowed to continue with financial aid for the semester but will remain in a probation category. There may be instances where the school requires that, before an appeal may be granted, the school and the student together develop an academic plan which ensures that the student will be making satisfactory academic progress prior to graduation.

Scholarships

Dordt University provides scholarship programs to encourage and recognize students for merit based abilities and talents. Donor-funded endowed and annually funded scholarships are also available and growing in number every year. These scholarships financially support students who have specific career goals, are involved in leadership roles, are from specific geographical areas, or have significant financial need. Scholarships are awarded to full-time students only. One half of the scholarship funds are applied to the recipients' tuition account each semester.

Dordt University Scholarships

Dordt University Collegiate, Honors, and Presidential Scholarships Dordt University Collegiate, Honors, and Presidential Scholarships are academic scholarships awarded on the basis of a student's cumulative GPA and ACT/SAT composite scores. There is no application process for these scholarships. Eligibility requirements are a 2.80 cumulative GPA and a 19 ACT (or 990 SAT) composite score. Dollar amounts range from \$4,000 to \$13,000 and will be named Collegiate Scholarships, Honors Scholarships, or Presidential Scholarships based on the dollar amount awarded.

Students who received Collegiate, Honors, or Presidential Scholarships as incoming freshmen will have their scholarship automatically renewed if they maintain a cumulative 2.80 GPA in their Dordt University courses after their first year. Students with sophomore or junior status must maintain a cumulative GPA of 3.0 at the end of the academic year to have their scholarship renewed. Students who lose a Presidential, Honors, or Collegiate Scholarship because they were not able to maintain the minimum 3.00 GPA requirement may have their scholarship reinstated at the end of any following academic year, upon regaining the required GPA. Students who did not meet the minimum GPA or ACT/SAT requirements for a scholarship when they enrolled at Dordt University will be eligible for a first-time scholarship at the end of any academic year, provided they have a Dordt University minimum cumulative 3.00 GPA.

Distinguished Scholar Awards Distinguished Scholar Awards are the most prestigious scholarships offered by Dordt University with ten students selected each year to receive this honor. These \$4,500 scholarships are in addition to the Presidential Scholarship that the student has earned and are renewable for an additional three consecutive years provided the recipient maintains a minimum 3.50 cumulative GPA. Students with a 3.75 cumulative GPA and a 32 ACT (or 1420 SAT) composite score will be invited to a Distinguished Scholar Day on campus during which a variety of activities related to academic interests will be presented. Written responses to two essay questions along with an interview will be part of the selection process for this award.

Kuyper Scholarships Dordt University Kuyper Scholars are automatically awarded a \$2,500 scholarship. Acceptance into the Kuyper Honors Program requires a 3.50 cumulative GPA, a 28 ACT (or 1300 SAT) composite score, a completed application form with an entrance essay, and letters of recommendation. Application materials are available from the Dordt University Admissions Office or the Dordt University website. Kuyper Scholarships are renewed if recipients maintain a 3.25 cumulative GPA and successfully participate in the Kuyper Honors Program as defined by the program advisors.

Dordt University Athletic Scholarships Athletic scholarships for various sports are available to students who contributed significantly to a high school athletic program and intend to actively participate in a Dordt University Athletic Program. Athletes can be awarded \$1,000 to \$14,000. Students interested in athletic scholarships should contact a sports coach through the Athletic Department. Athletic scholarships are renewable provided the student maintains the minimum cumulative GPA required by the NAIA and continues to successfully contribute to the athletic program as determined by the Athletic Department coaches.

Dordt University Music Scholarships Music scholarships of \$1,000 to \$6,000 are available for students who have contributed significantly to their high school or community music programs and intend to actively participate in one or more of the following Dordt University music areas: vocal, instrumental, or keyboard. Applicants need not be music majors; however, they must submit an application form and a music instructor's recommendation. Applicants must also audition in their chosen music area(s), following the

criteria listed on the Music Scholarship Application. The audition can be accomplished in one of three ways: attending the annual on-campus Music Audition Days; scheduling an appointment with the Admissions Office to audition in person on a Dordt University Campus Visit Day; or by submitting a recorded audition. Music scholarships are renewable provided the recipient maintains a minimum 2.00 cumulative GPA and successfully contributes to the music program as determined by the Music Department directors.

Dordt University Theatre Arts Scholarships Theatre arts scholarships of \$1,000 to \$4,000 are available for students who have contributed significantly to their high school or community theatre arts programs and intend to actively participate in the Dordt University Theatre Arts program through acting and/or technical work. Applicants must submit an application form, audition materials, and a recommendation letter from a person familiar with their talents and skills in theatre arts. Scholarships are available for theatre majors, minors, and non-majors and are renewable provided the recipient maintains a minimum cumulative GPA of 2.00 and completes the theatre scholarship requirements. Requirements include taking one theatre course each year and completing required hours in two of the following areas: backstage crew, acting, costume crew, makeup crew, box office crew, and set construction or design.

Dordt University Journalism Scholarships Journalism scholarships of \$1,000 to \$2,500 are available for students who contributed significantly to the publication of their high school newspaper or to any other publication project. Recipients need not be communication majors; however, they will be asked to enroll in Communication 241, Introduction to Journalism, in the fall of their first semester at Dordt. An application form and a recommendation from a person who can attest to the applicant's abilities in the area of journalism are required. Recipients are expected to participate in the publication of *The Diamond*, a biweekly university student newspaper. These scholarships are renewable provided the recipient maintains a 2.00 cumulative GPA and is an active staff member of the *The Diamond*, as determined by the newspaper's faculty advisors.

Forensics Scholarships Forensics Scholarships of \$1,000 to \$3,000 are available for students who have exhibited proficiency in the area of formal and/or competitive speech or debate. The scholarships are awarded on a basis of merit proved through accomplishments in high school, but do not require participation on a high school team. An application form and a recommendation from a person who can attest to the applicants abilities in these areas is required. These scholarships are renewable provided the recipient maintains a cumulative 2.00 GPA and is an active participant on the forensics team, as determined by the Director of Forensics in consultation with the other coaches.

Dordt Media Network Broadcast Remote Production Scholarships Broadcast Remote Production scholarships of \$1,500-\$2,000 are available for students who have an interest in learning and/or improving the skills of multi-camera live stream broadcast remote production. Applicants must intend to major or minor in Communications and submit an application, reference letter, and any videos that may represent their work and ability. Requirements include being able to work a minimum of ten hours a week, being available to work some nights and weekends, attend mandatory training sessions, and other duties as listed on the application form. Broadcast Remote scholarships are renewable for an additional three consecutive years provided the recipient maintains a cumulative 2.0 GPA and continues to complete the requirements of the scholarship.

Dordt Media Network Video Production Scholarships Video Production scholarships of \$1,000-\$1,500 are available for students who would like to contribute to the video production of various campus activities. Applicants must intend to major or minor in Communications and submit an application, reference letter, and any videos that may represent their work and ability. Requirements include taking Introduction to Film Studies during their freshman year, being able to work a minimum of 105 hours per semester, being available to work some nights and weekends, and other duties as listed on the application form. Video Production scholarships are renewable for an additional three consecutive years provided the recipient maintains a cumulative 2.0 GPA and continues to complete the requirements of the scholarship.

Transfer Student Scholarships Admitted transfer students are eligible for the following scholarships as previously described for incoming freshman students.

- Dordt University Collegiate, Honors, and Presidential Scholarships
- Kuyper Scholarships
- Dordt University Athletic Scholarships
- Dordt University Music Scholarships
- Dordt University Theatre Arts Scholarships
- Dordt University Journalism Scholarships
- Dordt University Forensics Scholarships
- Dordt University Media Network Broadcast Remote Production
- Dordt University Media Network Video Production

Dordt University Donor-Funded Endowed and Annual Scholarships

Individual donors, corporations, or foundations with an interest in supporting Dordt University have established over 300 scholarship programs benefiting more than 650 students each year. These scholarships are a vital part of making Dordt University an affordable Christian higher education institution for incoming freshmen as well as continuing students. Donor-funded scholarships vary in dollar amounts and in recipient selection criteria. Typically, the application process includes an application form and recommendation, and a scholarship committee that selects the recipients. Sometimes the donors request simply that the Office of Financial Aid and the Office of Scholarships select the most worthy recipient.

Scholarship descriptions and application instructions can be found online at www.dordt.edu/admissions-aid/financial-aid. Scholarships are conveniently categorized in the Scholarships for Freshmen section or the Scholarships for Upperclassmen section.

The Academic Program

Dordt University offers a wide variety of programs and majors for students wishing to earn a bachelor's degree. Dordt University also awards associate of arts degrees. These two-year programs offer a wide range of educational options through professionally and occupationally designed programs, or through a flexibly designed two-year sequence of relevant courses and educational experiences. A master of education degree is also available.

Advising

An academic advisor is assigned to each student. Because of the variety of educational opportunities available at Dordt University and alternative ways of achieving graduation requirements, students must confer with their advisor regularly to plan their academic program. The Academic Coordinator for International and Minority Students will make contact with international, ESL, and minority students so that these students can benefit from ongoing advising concerning their academic progress and so that the Dordt community can benefit from these students' unique experiences and insights. Career planning assistance from qualified personnel is available to help students select courses that will prepare them for service, vocations, or further schooling.

Core Program

The Core Program is required of all Dordt students. Its central purpose is to prepare students for faithful Christian discipleship in the areas and responsibilities of life that are common across academic majors and vocations.

The Core Program articulates and helps students develop a broad, firmly-rooted Christian perspective on life and learning; it helps develop an understanding of who humans are and how people are called to live in relationships and in a particular historical context; and it equips students with knowledge, competencies, critical thinking, and connections needed for both their specialized programs and for life-long learning and service to God's kingdom in the contemporary world.

Associate of Arts Degree

Graduation Requirements The formal requirements for graduation with an associate's degree are:

1. A minimum of 60 credits. In meeting this requirement, A.A. students must take Core Program requirements, complete requirements for an area of concentration, and may also take elective courses.
2. A minimum GPA of 2.00 (4.00 scale) in courses taken at Dordt University.
3. A minimum of 30 credits earned at Dordt University. A student may not receive both the A.A. and B.A. degrees at the same commencement. However, credits earned in obtaining the A.A. degree may be applied toward the B.A. degree at any time.
4. Participation in the freshman orientation and student assessment programs.

Core Program Requirements for Associate's Degrees The Core Program for all students pursuing associate's degrees consists of pre-disciplinary foundational studies and selected coursework in contextual and interdisciplinary studies. The Core Program for associate's degrees is designed to allow students to easily transition to a bachelor's degree program at any point during their program.

1. Pre-Disciplinary Foundational (14 - 26 credits)

Academic Competencies (3 - 15 credits) All academic competencies must be satisfied by the end of the freshman year. Options for satisfying the academic competency requirements depend on a student's academic background and include the following:

- strong high school preparation (demonstrated by high school record)
- ACT scores
- pre-testing
- completing a college-level course that meets the goals of each requirement

Mathematics Competency (0-4 credits)

- A score of 22 or higher on the mathematics portion of the ACT (0 credits)
- Students with a score of 18-21 on the mathematics portion of the ACT will be required to complete a mathematics course numbered 101-119 (3 credits)
- Students with a score below 18 on the mathematics portion of the ACT will be required to successfully complete Mathematics 100 – Mathematics for College (4 credits)

English Competency (3-4 credits)

- Completion of CORE 120: English Composition (3 credits)
- Students with a score below 18 on the English portion of the ACT will be required to successfully complete English 100 – Basic Writing for College Students (4 credits)

Communication Competency (0-3 credits)

- Completion of two or more communication courses in high school with grades of B or better (0 credits)
- Completion of CORE 110: Communication Foundations (3 credits)
- Active participation in Communication 051: Forensics for an entire academic year. (1 credit)

Foreign Language Competency (0-4 credits)

- Completion of two years of a single foreign language in high school with a grade no lower than a C in the second year (0 credits)
- Completion of Foreign Language 101 (4 credits)

Historical-Redemptive Outlook (11 credits)

Kingdom, Identity and Calling: CORE 100 (2 credits)

Roots of Western Culture and Worldview: CORE 140 (3 credits)

Western Culture in Global Context: CORE 145 (3 credits)

Biblical Foundations: CORE 150 (3 credits)

2. Contextual Inter-disciplinary (4 - 6 credits)

Health, Sport, and the Body: CORE 130 (1.5 credits)

Introduction to Lifetime Activities: CORE 135 (.5 credits)

Distribution Elective (2-4 credits) - one additional course from outside the student's division of study from the following:

Introduction to the Arts: CORE 160 (3 credits)

Responding to Literature: CORE 180 (3 credits)

Introduction to Christian Philosophy: CORE 200 (3 credits)

Natural Science: One lab-based science course (3-4 credits)

Quantitative Reasoning: Any mathematics or statistics course numbered 120 or higher (2-4 credits)

Persons in Community: CORE 250-259 (3 credits)

Justice and Stewardship: CORE 260-269 (3 credits)

Cross-Cultural Studies: CORE 270-289 (3 credits)

Area of Concentration (6 - 12 courses) Each student must choose an approved area of concentration. Course sequences for the various areas of concentration may be found as follows:

Administrative Assistant (see page 55)

Agriculture (see page 43)

Computer Networking (see page 70)

General Studies (see page 114)

Paraeducator Certification Options (see page 93)

Elective Courses (0 - 6 courses) These courses are to be selected by the student to meet individual needs and goals.

- A second area of concentration may be worked out.
- Cognate courses may be selected to support the area of concentration.
- Additional courses in the area of concentration may be selected.
- Courses that explore alternate career options may be selected.
- A wide distribution of courses may be chosen to provide a broad general background.

Associate of Science Degree (Professional-Technical Education)

Graduation Requirements The formal requirements for graduation with an associate of science degree are:

1. A minimum of 69.5 credits. In meeting this requirement, A.S. students must take Core Program requirements and complete requirements for either Agriculture: Farm Operations and Management or Manufacturing Engineering Technology.
2. A minimum GPA of 2.00 (4.00 scale) in courses taken at Dordt University.
3. A minimum of 30 credits earned at Dordt University. A student may not receive both the A.S. and B.A. degrees at the same commencement. Some credits earned in obtaining the A.S. degree may be applied toward the B.A. degree at any time.
4. Participation in the freshman orientation and student assessment programs.

Core Program Requirements for Associate of Science Degrees (24 - 30 credits) Students will.....

1. Complete foreign language competency.
Foreign Language Competency (0-4 credits)
 - Completion of one year of a single foreign language in high school with a grade no lower than a C (0 credits)
 - Completion of Foreign Language 101 (4 credits)
 2. Exhibit a joyful commitment to hearing and doing the Word of God, resulting in serving the lordship of Christ in all areas of their lives.
Kingdom, Identity, and Calling: CORE 100 (2 credits)
 3. Develop, articulate, and apply a mature and self-conscious Reformed Biblical perspective in their studies, while recognizing its distinctiveness compared with other perspectives.
Biblical Foundations: CORE 150 (3 credits)
 4. Practice and demonstrate rigorous critical thinking, quantitative, writing and reading, and communication skills and other competencies that are basic to continued learning across the curriculum.
Mathematics: Mathematics 100, 105, 115 or Statistics 131 (3-4 credits)
 - Students with a score of 22 or higher on the mathematics portion of the ACT will be required to complete Mathematics 105, 115 or Statistics 131 (3-4 credits)
 - Students with a score of 18-21 on the mathematics portion of the ACT will be required to complete Mathematics 105 or 115 (3 credits)
 - Students with a score below 18 on the mathematics portion of the ACT will be required to complete Mathematics 100 (4 credits)
 - Students without an ACT mathematics score will be required to take the ALEKS placement test and will be placed in the appropriate mathematics course.*Workplace Writing: English 105 (3-4 credits)**
Workplace Communication: Communication 105 (3 credits)
- *Students with a score below 18 on the English portion of the ACT will be required to enroll in an additional one credit tutorial session (105L).
5. Demonstrate deepening insight into both Western culture and contemporary global development, and the spirits that drive them, including critically assessing these and practicing creative solutions and alternatives to their problems from a Biblical perspective.
Early Modern Western Culture and Worldviews: CORE 175 (2.5 credits)
Modern Western Culture in Global Context: CORE 176 (2.5 credits)
 6. Demonstrate deepening insight into and practical response to the God-given structural inter-dependence of humans with each other and with the broader creation (e.g. society, the environment), and to our role as stewards and agents of shalom in creation.
Leading and Serving Others: CORE 258 (3 credits)
Serving Christ's Kingdom through Pro-Tech: CORE/TECH 268 (2 credits)

Majors (19 - 20 courses) To earn an associate of science degree from Dordt University, a graduate must complete the Agriculture: Farm Operations and Management or Manufacturing Technology major. Course sequences for the majors may be found on page 136.

Bachelor's Degrees

Degree Types Bachelor's degree recipients will earn one of the following degrees:

Bachelor of Arts
 Bachelor of Science
 Bachelor of Science in Engineering

Bachelor of Science in Nursing
 Bachelor of Social Work

Graduation Requirements The formal requirements for graduation with a bachelor's degree are the following:

1. A minimum GPA of 2.00 (4.00 scale) in courses taken at Dordt University.
2. A minimum of 124 credits. In meeting this requirement, students must fulfill the Core Program requirements, complete a major, and in many cases, take elective or professional courses.
3. Eight semesters of full-time study or its equivalent. (See page 40, Residence Requirement.)
4. Participation in freshman orientation and the freshman, junior, and senior assessment program.

Core Program Requirements for Bachelor's Degrees (42.5 - 64 credits) For all students pursuing a bachelor's degree, the Core Program consists of pre-disciplinary foundational studies, contextual and interdisciplinary studies, and post-disciplinary integrative studies. Typically, students will begin pre-disciplinary coursework their freshman year and most will complete it by the end of their sophomore year. Beginning with their sophomore year, students will move on to contextual and interdisciplinary coursework and then finish their academic careers with the post-disciplinary integrative coursework.

1. Pre-disciplinary Foundational (14 - 29 credits)

Academic Competencies (3 - 18 credits) All academic competencies must be satisfied by the end of the freshman year unless otherwise noted. Options for satisfying the academic competency requirements depend on a student's academic background and include the following:

- strong high school preparation (demonstrated by high school record)
- ACT scores
- pre-testing
- completing a college-level course that meets the goals of each requirement

Mathematics Competency (0-4 credits)

- A score of 22 or higher on the mathematics portion of the ACT (0 credits)
- Students with a score of 18-21 on the mathematics portion of the ACT will be required to complete a math course numbered 101-119. This course must be completed prior to taking the quantitative reasoning course. (3 credits)
- Students with a score below 18 on the mathematics portion of the ACT will be required to successfully complete Mathematics 100 – Mathematics for College during their first year of study and prior to taking the quantitative reasoning course. (4 credits)

English Competency (3-4 credits)*

- A score of 24 or higher on the English portion of the ACT and completion of a writing-intensive college course (English 220, 305, 306, English 301/Communication 301, English 302/Communication 302, History 280, Psychology 366, Theatre Arts 365). Approved courses are designated as writing-intensive in the course description. Students in this category need not complete the writing-intensive course during their freshman year. (3-4 credits)
- Completion of CORE 120: English Composition (3 credits)
- Students with a score below 18 on the English portion of the ACT will be required to successfully complete English 100 – Basic Writing for College Students (4 credits)

Communication Competency (0-3 credits)

- Completion of two or more communication courses in high school with grades of B or better (0 credits)
- Completion of CORE 110: Communication Foundations (3 credits)
- Active participation in Communication 051: Forensics for an entire academic year (2 credits)

Foreign Language Competency (0-7 credits)

- Completion of two years of a single foreign language in high school with a grade no lower than a C in the second year (0 credits)
- Completion of Foreign Language 101 (if required) and 102. Any required foreign language study must be completed prior to completing the Cross-Cultural Studies requirement below, and should be completed by the end of the sophomore year (3-7 credits)

Historical-Redemptive Outlook (11 credits)

Kingdom, Identity, and Calling: CORE 100 (2 credits)

Roots of Western Culture and Worldviews: CORE 140 (3 credits)

Western Culture in Global Context: CORE 145 (3 credits)

Biblical Foundations: CORE 150 (3 credits)

2. Contextual Inter-disciplinary (22.5 - 29 credits)

Health, Sport, and the Body: CORE 130 (1.5 credits)

Three Activity Components from the following: (1-1.5 credits)

Introduction to Lifetime Activities: CORE 135 (.5 credits per activity - may complete up to 3)

Participation in one season of intercollegiate athletics at Dordt University: HHP 011 (.5 credits)

Completion of one activity course: HHP 012-019 (.5 credits)

Participation in two seasons of JV or Varsity athletics in high school with documentation from the high school (0 credits)

Introduction to the Arts: CORE 160 (3 credits)

Students majoring in one of the arts (art, music, theatre, digital media) may meet this requirement by completing either CORE 160 or three credits in the arts outside their major.

Responding to Literature: CORE 180 (3 credits)

Introduction to Christian Philosophy: CORE 200 (3 credits)

Natural Science:* One lab-based science course. CORE 211-229 recommended for non-science majors. (3-4 credits)

Quantitative Reasoning:* Any mathematics or statistics course numbered 120 or higher (2-4 credits)

(No single course can meet both the natural science and quantitative reasoning requirements.)

Persons in Community:* CORE 250-259 (3 credits)

Justice and Stewardship:* CORE 260-269 (3 credits)

Cross-Cultural Studies:* (0-3 credits)

The cross-cultural requirement may be met in one of the following ways:

A. Students who have completed fewer than three years of high school foreign language are required to complete one of the following for a minimum of three college-level credits:

- One course from CORE 270-289, Dutch, French, or Spanish 201, 204, 206
- A pre-approved semester-long, cross-culture program (e.g., see page 32, SPICE)
- A pre-approved cross-cultural experience of no less than two weeks fully immersed in the culture

B. Students who have completed three or more years of high school foreign language with grades no lower than C in the final year are required to complete one of the following:

- One of the options listed in section A
- A pre-approved cross-cultural experience sometime during college that may be less than two weeks (e.g. AMOR). This experience is not required to be taken for credit.

C. Students who have lived in another non-English speaking culture for at least one semester in their high school years may petition to have the cross-cultural requirement waived.

3. Post-Disciplinary Integrative (6 credits)

Advanced Reformed Thought:* CORE 310-329 (3 credits)

Calling, Task, and Culture: CORE 399 (3 credits)

* Denotes requirements that could be satisfied via courses in a student's major area of study.

Majors To earn a bachelor's degree from Dordt University, a graduate must complete one major—a sequence of at least 10 courses in a subject area. A complete list of majors available at Dordt University, along with their applicable degree (B.A., B.S., B.S.E., B.S.N., B.S.W.), is on page 27. In addition, majors that are available in the Teacher Preparation Program are designated as elementary (E) or secondary (S).

Electives, Minors, and Professional Courses Students may choose elective courses that complement their majors or that arise out of special interest. Students earning a bachelor's degree must take as many elective credits as needed to meet the 124-credit requirement, after meeting the Core Program and major requirements. In certain subject areas a minor of 18 to 24 credits may be earned. A complete list of minors available at Dordt University is on page 28. Minors that are available in the Teacher Preparation Program are designated as elementary (E) or secondary (S).

Majors

Accounting (BA)

Actuarial Science (BA)

Agriculture (BA) (BS) (S)

Agri-Business Emphasis (BA)

Animal Science Emphasis (BS)

Biotechnology Emphasis (BS)

Missions Emphasis (BA)

Plant Science Emphasis (BS)

Applied Science and Technology

Computerized Manufacturing Emphasis (BA)

Electrical Technology Emphasis (BA)

Industrial Instrumentation, Control Emphasis (BA)

Manufacturing Engineering Emphasis (BA)

Art

Art (E) (S)

Art History Emphasis (BA)

Fine Arts Studio Emphasis (BA)

Graphic Design Emphasis (BA)

Pre-architectural Design Emphasis (BA)

Biology (BA) (BS) (S)

Business Administration (BA)

Construction Management Emphasis (BA)

Finance Emphasis (BA)

Human Resource Management Emphasis (BA)

Information Systems Emphasis (BA)

International Business Emphasis (BA)

Management Emphasis (BA)

Marketing Emphasis (BA)

Office Management Emphasis (BA)

Public Administration Emphasis (BA)

Business Education (S)

Chemistry (BA) (BS) (S)

Communication

Communication Studies Emphasis (BA)

Digital Media Production (BA)

Healthcare Communication Emphasis (BA)

Journalism (BA)

Public Relations Emphasis (BA)

Community Development (BA)

Computer Science (BA)

Computer Science/Mathematics (BA)

Criminal Justice (BA)

Data Science (BA)

Dutch (BA)

Economics (BA)

Education (BA) (E) (S)

Engineering (S)

Biomedical Emphasis (BSE)

Chemical Emphasis (BSE)

Civil Emphasis (BSE)

Computer Emphasis (BSE)

Electrical Emphasis (BSE)

Mechanical Emphasis (BSE)

Engineering Science (BA) (S)

Architecture Emphasis (BA)

Construction Management Emphasis (BA)

English

Literature Emphasis (BA)

Writing Emphasis (BA)

English/Language Arts (S)

English/Language Arts-All (S)

Environmental Studies

Environmental Science Emphasis (BA)

Natural Resource Management Emphasis (BA)

Policy and Management Emphasis (BA)

Foreign Language

French Emphasis (E) (S)

Spanish Emphasis (E) (S)

Health and Human Performance (BA)

Exercise Science Emphasis (BA)

Physical Education (E) (S)

Sports Management Emphasis (BA)

History (BA)

American and World (S)

Museum Studies Emphasis (BA)

World (S)

Individual Studies (BA)

Industrial Technology (S)

Mathematics (BA) (S)

Medical Laboratory Science (BS)

Music (BA) (E)

Church Music Emphasis (BA)

Music Management Emphasis (BA)

Performance and Pedagogy Emphasis (BA)

Choral Music Education (S)

Instrumental Music Education (S)

Choral/Instrumental Music Education (S)

Nursing (BSN)

Philosophy (BA)

Physics (BA) (S)

Political Science (BA)

Psychology (BA)

Social Science (S)

Social Work (BSW)

Spanish (BA)

Statistics (BA)

Theatre Arts

Acting/Directing Emphasis (BA)

Design and Technical Theatre Emphasis (BA)

Drama Ministry Emphasis (BA)

Dramaturgy/Playwriting Emphasis (BA)

Theatre Management Emphasis (BA)

Theology

Biblical Studies Emphasis (BA)

Mission and Ministry Emphasis (BA)

Theological Studies Emphasis (BA)

Youth Ministry Emphasis (BA)

Worship Arts (BA)

Minors

Accounting (G)	Early Childhood (E)	Philosophy (G)
Actuarial Science (G)	Economics (G)	Physics (G) (S)
Agriculture (G)	English (G)	Political Science (G)
American Government (S)	Writing (G)	International Politics (G)
American Studies (G)	English/Language Arts (E) (S)	Public Policy and Administration (G)
Art (G) (E) (S)	Environmental Studies (G)	Psychology (G)
Biology (G) (S)	Environmental Science (G)	Reading (E)
Biomedical Sciences (G)	French (G)	Science - Basic (E)
Business Administration (G)	Health and Human Performance (G)	Social Studies (E)
Digital Marketing	Health (E) (S)	Sociology (G)
Human Resource Management (G)	Physical Education (E) (S)	Spanish (G) (E) (S)
Chemistry (G) (S)	History-World (S)	Special Education (E) (S)
Communication Studies (G)	Journalism (G)	Statistics - Applied (G)
Public Relations (G)	Kuyper Honors Program (G)	STEM (E) (S)
Speech Communication/Theatre (E) (S)	Legal Studies (G)	TESL (E) (S)
Community Development (G)	Linguistics-Interdisciplinary (G)	Theatre Arts (G)
Computer Science (G)	Mathematics (G) (E) (S)	Theology
Web Software Development (G)	Applied Mathematics (G)	Bible (S)
Criminal Justice (G)	Middle School (E) (S)	Theological Studies (G)
Digital Media Production (G)	Music (G) (E)	Worship Arts (G)
Dutch (G)	Music Performance (G)	

Policy Regarding Transcription of Majors and Minors A major or minor is transcribed if the student meets all of the catalog requirements for the major or minor and the student meets the following minimum credit requirements:

- Minimum credits for a major: 30
- Minimum credits for a minor: 18
- Minimum credits for a major and minor: 48
- Minimum credits for each additional major: 24
- Minimum credits for each additional emphasis or minor: 15
- Students may not major and minor in the same discipline

Master’s Degree

Dordt University offers a master of public administration degree and a master of education degree with tracks in curriculum and instruction and administration. The 30-38 credit programs can be completed in as few as two calendar years. For more information on the master’s programs see page 156.

Pre-professional Programs

Preparation for Graduate Study Through its major departments, Dordt University prepares students for graduate-level work. Students who plan to do graduate work should consult faculty members in the major department when selecting courses in the major field of study or in related supporting subjects. Courses should be carefully selected to meet the specific requirements of the graduate school that the student plans to enter.

Pre-professional Programs Students wishing to prepare for professional schooling may enter one of the following programs:

Pre-architecture	Pre-chiropractic	Pre-dentistry	Pre-legal
Pre-medical	Pre-occupational Therapy	Pre-optometry	Pre-pharmacy
Pre-physical Therapy	Pre-seminary	Pre-veterinary	

All of these programs lead to the B.A. degree and prepare the student for graduate-level studies. Students in pre-professional programs normally complete one major at Dordt. Pre-professional programs do not mandate any specific major. Students should work closely with the program advisor to plan a course of study and select a major that will adequately prepare them for the professional school(s) of their choice.

Pre-architecture Program**Matthew Drissell, Program Advisor**

Architects work alongside engineers to design buildings and other public structures that meet the needs of individuals and communities. Architects must concern themselves with the aesthetic normativity of a structural design, while working to create structures that are environmentally responsible and culturally appropriate. Along with a team of engineers and construction managers, an architect is responsible for designing a structure that is both safe and ergonomic. Architects serve communities by designing buildings and landscapes that reflect responsible use of spatial, material, environmental, and economic resources.

There are multiple educational paths that lead to a career in architecture. One of the common academic paths into the profession of architecture is to first complete an interdisciplinary B.A. or B.S. degree in a pre-architectural program at a liberal arts college. To be eligible for professional licensure as an architect, a student will then complete a three- to four-year masters of architecture degree at an institution that offers an accredited architecture graduate program. While the entrance requirements for architectural graduate programs vary, most programs prefer students to have completed an interdisciplinary liberal arts bachelor's degree that includes courses from art, graphic design, physics, mathematics, engineering, economics, history, environmental studies, philosophy, or psychology. Demonstrating proficient writing and communication skills is essential for admission into professional architectural programs.

While a variety of general bachelor degree programs can provide an adequate foundation for further architectural studies, Dordt has two pre-professional major options specifically designed to guide students through an undergraduate program of study that will meet the requirements of many graduate programs in architecture; a B.A. degree in art with an architectural design emphasis, and a B.A. degree in engineering science with an architecture emphasis.

Pre-chiropractic Program**Dr. Tony Jelsma, Program Advisor**

Chiropractic care concerns the relationship between the nervous system and the rest of the body to maintain optimal health, and it focuses on allowing the body to heal itself without the use of drugs or surgery. Maintaining the proper structure of the spine will allow the nervous system to function as it should to regulate the rest of the body.

The pre-chiropractic program at Dordt University prepares students for admission to a school of chiropractic. At least three years of study at Dordt are required, which will provide the necessary background in the sciences, including biology, chemistry, and physics courses, as well as courses in the humanities and social sciences. Since required courses may vary between chiropractic graduate schools, students are advised to check requirements of specific schools early in their college career.

Pre-dentistry Program**Dr. Tony Jelsma, Program Advisor**

A career in dentistry involves diagnosis, treatment, and prevention of problems affecting teeth and mouth tissue, aesthetic improvement, detection of diseases, surgical restoration, and public education and prevention. Most dental schools require three or four years of college before admission to the dental school. Prerequisite courses for admission typically include general chemistry, organic chemistry, biochemistry, physics, English, biology, and psychology.

Since required courses for admission may vary between dentistry graduate schools, students are advised to check requirements of specific schools early in their college career.

Pre-legal Program**Donald Roth, Program Advisor**

Law schools look for college graduates who demonstrate leadership, exemplify strong character, and possess well-developed writing and analytical skills. The Pre-legal Program is designed as an advisory tool to assist students who are considering or planning to attend law school. Since law schools do not have any specific academic course requirements for admission, a broad liberal arts program, including major and selected electives, provides the most appropriate preparation. At Dordt, prelaw students receive a B.A. degree with a major in political science, history, English, social work, psychology, philosophy, business administration, or criminal justice, depending on their interests. In addition, many students participate in an off-campus program that enables them to serve as an intern and gain experience in legal practice. They are also advised on a range of electives to help prepare them for the Law School Admission Test (LSAT), required for entrance to an accredited law school, and expand their critical thinking, writing, and analytical perspective.

Although they are not required prelaw courses, American constitutional law, business law, criminal law, and criminal procedure are courses that provide a beneficial context for the later pursuit of legal studies.

Pre-medical Program**Dr. Robbin Eppinga and Dr. Carl Fictorie, Program Advisors**

A medical profession may be demanding but also very rewarding as it offers numerous opportunities to serve and care for people. The undergraduate pre-medical program provides the required background and skills in the basic sciences and communication to succeed in medical school. However, medical schools seek out students with broad interests and abilities. Excellent performance in Dordt University's Core Program curriculum is important.

Each medical school has a unique set of admission requirements, but most schools require courses in biology, chemistry, physics, advanced writing, calculus, and/or statistics. Additional coursework in human anatomy and physiology, biochemistry, genetics, cell biology, and microbiology are strongly recommended. Medical schools seek a diverse cohort, so any academic major may be completed in conjunction with the above requirements. Students should have a cumulative GPA of 3.50 or higher, particularly in the required courses above.

In the spring of the junior year, students are required to take the Medical College Admissions Test (MCAT), the scores of which are used by many medical schools in admission decisions. The MCAT is based on the material covered in the required coursework in biology, chemistry, physics, English, psychology, and sociology.

In addition to academic excellence, students should demonstrate a commitment to and passion for helping people through volunteering, extracurricular activities, and employment. Good communication skills, leadership abilities, dedication, and self-motivation are all important qualities medical schools seek in applicants. The Future Physicians Club exists to provide a means by which pre-medical students can get to know each other and help each other with planning, MCAT preparation, medical school applications, volunteering activities, and co-curricular activities.

The pre-medical program, while designed specifically for students interested in medical school, also serves as a good background for entry into most postgraduate professional medical programs. Additional information about the pre-medical program is available at: www.dordt.edu/academics under Pre-professional Programs.

Pre-occupational Therapy Program**Dr. Mark Christians, Program Advisor**

Occupational therapy is the health profession that uses everyday activities as the means of helping people achieve independence. A variety of rehabilitative, educational, social, and vocational activities are used to treat adults and children with disabilities resulting from physical injury, disease, developmental delays, aging, and psychological dysfunctions. Occupational therapists help individuals adapt or improve performance in areas of work, school, independent living, and play. The goal for all patients is to attain the maximum level of independence and productivity possible.

Although Dordt does not offer a professional degree or major in occupational therapy, an excellent pre-professional program is available that prepares the student for subsequent professional education. A student may complete a B.A. degree at Dordt along with the pre-occupational therapy program of study and then apply for admission to an occupational therapy program. Information is available in the career development office relating to specific requirements of graduate schools. Certification as an occupational therapist is based on graduation from an approved occupational therapy program and acceptable performance on the American Occupational Therapy examination.

Appropriate majors for students interested in a career in occupational therapy include psychology, biology, or health and human performance. A foundation in biology and psychology is required. Since required courses for admission may vary between occupational therapy graduate schools, students are advised to check requirements of specific schools early in their college career.

Pre-optometry Program**Dr. Tony Jelsma, Program Advisor**

Doctors of optometry provide vision care. As independent primary health care providers, they examine, diagnose, treat, and manage diseases and disorders of not only the eyes but also the entire visual system. Optometrists work with other health professionals in co-managing a patient's care. Most optometry schools require four years of college before admission to the optometry school. Courses generally required for admission include general chemistry, organic chemistry, calculus, physics, biochemistry, anatomy, microbiology, statistics, and psychology. Since required courses for admission may vary between optometry graduate schools, students are advised to check requirements of specific schools early in their college career.

Pre-pharmacy Program**Dr. Tony Jelsma, Program Advisor**

Pharmacy is a profession that cares for patients' drug-related needs in community pharmacies, hospitals, long-term care facilities, and home health care settings. Many pharmacy programs include two years of pre-pharmacy college courses followed by four more years of a pharmacy program, leading to a doctor of pharmacy degree.

Courses generally required for admission include general chemistry, organic chemistry, physics, general biology, microbiology, anatomy, economics, calculus, communication, English composition. Some schools also require the Pharmacy College Admissions Test (PCAT) to be taken. Since required courses for admission may vary between pharmacy graduate schools, students are advised to check requirements of specific schools early in their college career.

Pre-physical Therapy Program**Dr. Craig Stiemsma, Program Advisor**

Physical therapy is a health profession with a primary purpose of promoting of optimal human health and function through the application of scientific principles to prevent, identify, assess, correct, or alleviate acute or prolonged movement dysfunction.

Although Dordt does not offer a professional degree or major in physical therapy, an excellent pre-professional program is available that prepares the student for subsequent professional education. A student may complete a B.A. degree at Dordt along with the pre-physical therapy program of study and then apply for admission to a physical therapy program. Information is available in the Career Development Center on specific requirements for graduate schools. Licensure as a physical therapist is based on graduation from an approved physical therapy program and passing a licensure examination.

A student may select any major, but the following pre-professional courses must be completed: biology, chemistry, physics, psychology, abnormal psychology, and mathematics. Since required courses for admission may vary between physical therapy graduate schools, students are advised to check requirements of specific schools early in their college career.

Pre-seminary Program**Dr. Justin Bailey, Program Advisor**

Statistically, nearly half of seminarians complete their B.A. degree before making the decision to seek ordination into church ministry. College plays a critical role in this decision, either confirming a call to the Gospel ministry or encouraging a search in a different direction. Dordt University offers classes that are meant “to develop and implement an understanding of the entire creation in the liberating light of the Scripture.”

Although Dordt does not offer a professional degree or major in seminary, an excellent pre-professional program is available that prepares the student for subsequent professional education. Individually assigned personal advisors, the camaraderie with fellow pre-seminarians, as well as connecting with students with different life goals, all contribute to the breadth of the Dordt University pre-seminary program. Courses in history, English, philosophy, communication, psychology, the arts and science — all taught in the light of God’s Word — will help pre-seminary students see how they can bring glory to God in almost any topic of study. Also, courses in the language of the Bible, as well as modern foreign languages, equip the prospective minister to handle the biblical text and read current and classical theological works in their original form. Since required courses for admission may vary between seminary graduate schools, students are advised to check requirements of specific schools early in their college career.

Pre-veterinary Program**Dr. John Olthoff, Program Advisor**

Veterinary medicine is an animal health profession that is dedicated to protecting the health and welfare of people and animals. Veterinarians are highly educated and skilled in preventing, diagnosing, and treating animal health problems. They work in private practice with both large and small animals, or in research, public health, the military, regulatory agencies, and zoos.

Although Dordt does not offer a professional degree or major in veterinary medicine, an excellent pre-professional program is available that prepares the student for subsequent professional education. Students can major in biology, animal science, chemistry, or agriculture. Dordt also works with many local veterinarians, pharmaceutical companies, and professionals involved with animal health to provide students with professional experience that is often required by schools of veterinary medicine. Since required courses for admission may vary between veterinary graduate schools, students are advised to check requirements of specific schools early in their college career.

Off-Campus Study

Students should contact the coordinator of off-campus programs for information and application forms. The coordinator will also help students identify courses in these programs that meet Core Program requirements.

Off-Campus Policies

1. Students must be in good academic, financial, and behavioral standing to participate in off-campus programs and courses. (See *Student Handbook for Off-Campus Behavioral Expectations*.)
2. The pass-fail option is not available for off-campus programs and courses.
3. Cancellation Policy
 - Dordt University may cancel off-campus programs, courses, or service projects when, prior to departure for the program, the U.S. State Department issues a travel warning for the location of the program, course, or project. In addition, the university may choose not to participate in or provide student financial assistance for off-campus programs offered by partner colleges or organizations for locations under the U.S. State Department travel warning.
 - If a U.S. State Department travel warning is issued once a program is in progress for a country in which Dordt is currently operating an off-campus program, course, or project, the coordinator for off-campus programs will notify the crisis management coordinator, who may implement the crisis management plan.
 - If a U.S. State Department travel warning is issued once a program is in progress for a country in which Dordt students are participating in an off-campus program offered by a partner college or organization, the coordinator for off-campus programs will consult with the partner organization’s designated director and their on-site staff and may implement a crisis plan that carefully follows the State Department’s advice.
4. Refund Policy
 - If Dordt University cancels the program prior to departure, students will receive a full refund of any tuition or program fees paid. Any portion of a non-refundable deposit not encumbered (e.g. travel arrangements, housing deposits) will also be returned.
 - If a student withdraws from a program prior to departure, he/she is responsible for any expenses incurred on his/her behalf by Dordt University (or the sponsoring organization) in preparation for the program.
 - If it becomes necessary to cancel a program in progress, Dordt’s refund policies will be followed (see page 15). Additional expenses incurred for an early departure may need to be deducted from any refund provided.
 - If a student withdraws from a program after the program has begun, Dordt’s refund policies or the policies of the sponsoring organization will be followed. Students are responsible for any other costs incurred by an early departure. (Early

- withdrawals for medical reasons are covered by a separate policy.)
- Students dismissed from a program for behavioral reasons will be charged the full fee and are responsible for any other costs incurred by an early departure.

Dordt University Semester Programs: SPICE, Semester in Korea, and Semester in Zambia

Minimum requirements: sophomore status and a 2.50 cumulative GPA.

* Denotes programs that satisfy the Core Program cross-cultural requirement.

Studies Program In Contemporary Europe* (SPICE) Dordt University, in cooperation with the Gereformeerde Hogeschool in Zwolle, offers students the opportunity to study in the Netherlands every spring semester. Students live with host families and choose to study in one of four tracks: Western European Culture, International Business, Nursing, or International Education. All tracks include a week-long trip to Rome, where students will gain insights into historical, religious, and cultural developments through presentations and excursions.

Students must select one of four SPICE track options:

SPICE: Western European Culture Track: SPCE 160, 270, 271; SPCE 148 and one course from SPCE 100, 102, 201. SPCE 310 may be taken as an elective.

SPICE: International Business Track: SPCE 160, 270, 271, 371; possible elective options include SPCE 100, 102, 201, 148, 310.

SPICE: Nursing Track: one or two electives from SPCE 160, 270, 271; Nursing 352, 330, 390; possible elective from SPCE 100, 102, 201, 148, 310.

SPICE: International Education Track: SPCE 160, 270, 271; Education 239(a), 349(a); Individual Studies 391 (Comparative Education); possible elective from SPCE 100, 102, 201, 148, 310.

Studies Program In Contemporary Europe (SPICE) Academic Offerings

- | | | |
|-----|--|--------|
| 100 | Beginning Dutch (3) | Spring |
| | A beginner's course on the language and culture of Dutch-speaking people, designed to develop listening and reading comprehension skills and speaking and writing skills in Dutch through exercises, listening, interviews of native Dutch speakers, and small group conversations. | |
| 102 | Elementary Dutch (3) | Spring |
| | This course on the language and the culture of Dutch-speaking people is designed to develop listening and reading comprehension, spoken and written Dutch in a communicative context. The course includes interviews of native Dutch speakers, sessions with native students, and various other language activities. Prerequisite: Dutch 101 or its equivalent. | |
| 201 | Intermediate Dutch (3) | Spring |
| | An intermediate course that continues the study of the language in a communicative context with emphasis on precision and expansion of linguistic skills. Emphasis is also put on the development of cultural understanding and sensitivity, studying people's values and beliefs as expressed in their economic, political, and religious systems. Prerequisite: Dutch 102 or its equivalent. | |
| 148 | History of the Low Countries (3) | Spring |
| | This course will focus on the history of the Netherlands from 1815 until the present, with special attention on the history of religion and the church. The course will be in chronological order generally; some aspects of the Dutch society will be explored in themes. | |
| 160 | Dutch Art and Architecture (3) | Spring |
| | An introduction to the history of Dutch art and architecture from the Middle Ages to the present day. There will be many excursions to view various artworks "live." Students will develop insight into how to understand art and how the Dutch identity is reflected in its art and architecture. They will also develop some understanding of the importance of the works in culture and history. This will be achieved by presentations of classmates, lectures, readings, and field trips. | |
| 270 | Cross-Cultural Explorations: Conversation, Reflection, and Travel (Portfolio) (3) | Spring |
| | Living and studying in a different culture brings new information, experiences, and perceptions. This course helps students take the time to observe and reflect on the similarities and differences between this culture and the culture of one's home through structured and systematic observation and reflection. Students develop their own portfolio (reflective journal) in preparation for a presentation at the semester's end. | |
| 271 | Dutch Culture and Society (3) | Spring |
| | This course focuses on contemporary issues in the Netherlands as an urbanized society. By studying the culture that gets lived out in the heart of the Netherlands, students become part of the "social experiment" that Dutch society is—a society that is in a constant process of evolving and adapting new forms as it enters a new era of economic and political affiliations within a larger European community. | |

- 310 **Contemporary Theology (3)**.....Spring
This course will survey several important theologians and theological trends from the 20th century, including liberation theology and other significant schools of thought, and will compare them with Reformed theology.
- 341 **Special Topics in Dutch Literature or Composition (3)**Spring
Offered on the basis of student interest and instructor availability.
- 371 **Cross-Cultural Exploration and Practicum in Dutch Businesses (3)**.....Spring
This course is organized as a cross-cultural exploration and practicum in business that helps students to understand the Dutch business context and culture from different perspectives. Special attention will be given to different production concepts and Christian ethics in business. During the course, students will carry out real-time assignments and deal with real-life consultancy cases for Dutch businesses.
- 392- **Individual Studies (2-3)**Spring
393 Open to qualified juniors and seniors on a limited basis with permission from the coordinator of off-campus programs and the registrar. (See page 40 for procedures and policies.) *Note:* SPCE 392-3 proposals must be submitted before November 1.

Semester in Korea* In cooperation with Handong University, a Christian, English-speaking university, Dordt University students may spend a semester living and studying in South Korea. Students live in the international dormitory with Koreans and other international students, and may take courses from a broad array of options, including engineering, business, and the humanities. In addition to their coursework, students can get involved with a variety of groups and ministries on campus as well as travel within Korea and the surrounding region. This program is open to all qualified sophomores, juniors, and seniors.

Semester in Zambia* The Semester in Zambia offers a unique opportunity for students to experience life as a student in Africa. Students will study at Northrise University, a Christian institution in Ndola, Zambia. Choose from coursework in business, information technology, theology, or agriculture while building relationships with students in sub-Saharan Africa. This program, open to sophomores, juniors, and seniors, gives a first-hand view into the struggles and joys of life in Zambia.

Shared Sponsorship Program

Chicago Semester Selected juniors and seniors may register for a semester of living, learning, and working in a major urban center. The Chicago Semester is cosponsored by Calvin, Central, Dordt, Hope, Northwestern, and Trinity Christian and is a fully accredited, educational program under the supervision of Trinity Christian College. Students spend four days a week in an internship related to their academic major and career interest. They also participate in seminars one day per week. To achieve 15 hours of academic credit, students must take the internship course plus two of the three seminars offered. The Metropolitan Seminar on Ethnic and Racial Diversity can be used to meet the cross-cultural requirement. Minimum requirements are junior status and a 2.50 cumulative GPA.

Calvin University Programs

Calvin University offers several off-campus programs that Dordt students may attend on a room-available basis. Minimum requirements are sophomore status and a 2.50 cumulative GPA.

Study in China* (STCH) Study traditional and modern China while experiencing life in its capital, Beijing, and exploring other areas of this fascinating country. Living and studying at the Capital Normal University allows for interaction with Chinese and foreign students and gives access to the National Library, sports facilities, and parks. Visit important cultural and historical sites such as the Great Wall and China's most holy mountain Taishan. Tackle the Chinese language and be immersed in Chinese history and contemporary issues. (Fall semester)

Study in Britain* (STBR) Narrow, winding streets, ancient timbered houses, and no cars — this is the center of York, the host city for Calvin's semester in Britain. The city's layers of history will be a constant source of intrigue as students study at York St. John University, located right in the heart of it all. Students live and study together as a Christian community in the midst of one of the world's busiest and most multicultural cities, York, England, with its rich history and a society markedly more "post-Christian" than North America. Students take two courses taught by the Calvin professor in residence and other courses at York St. John University. (Spring semester)

Study in France* (STFR) Live with French families in Grenoble, nestled in the French Alps, and study the French language with other foreign students from around the world. Become acquainted with the wide variety of historical, natural, and cultural forces that have shaped contemporary France by going on excursions offered by the Centre Universitaire d'Études Françaises (CUEF) and by taking classes about French history, politics, literature, and art. During free time, enjoy hiking and skiing in the mountains or travel to destinations such as Paris, Geneva, the French Riviera, or Italy. (Fall semester)

Study in Ghana* (STGH) Enter into dialogue with Ghanaians, study the history and peoples of the country, and encounter worldviews different from those prevalent in North America. The semester in Ghana program strives for understanding the emerging theological, historical, and social perspectives within Ghana and throughout sub-Saharan Africa. Reflection and discussion is encouraged on the implication of common humanity and different understandings as Christians in God's world. Live in a university residence, study the Twi language, and interact with Africans to experience a part of this rich country. (Fall semester)

Development Study in Honduras* (STHO) Study development theory and Honduran history. Live with a Honduran third-world family. Improve Spanish language skills, and visit urban squatters' camps, remote rural villages, and tropical rain forests. For added experience, excursions include trips to banana plantations, shrimp farms, and development organizations involved in health and literacy projects. At these different locations, students can talk with national leaders about Honduras' problems and future. The director leads discussions to encourage thinking and living as Christians in God's world. Wrap up the whole experience by evaluating a specific development program. (Spring semester)

Spanish Studies in Honduras* (SPHO) Become acquainted with the world of Honduras by immersion in the Spanish language and Latin American literature and culture. The Spanish Studies program provides an opportunity to be confronted with many situations that enable exploration of the meaning of faith in a third-world country. Intensive study and living with a Honduran family grants necessary skills for building relationships with people of another language and culture. An emphasis on poverty and development aids understanding the connection between North American lives and lives of the poor. (Fall semester)

Study in Hungary* (STHU) Witness the exhilarating changes of the 20th century from the vantage point of Budapest, one of Europe's most beautiful capital cities. Live and study together as a Christian academic community at the Technical University of Budapest in the midst of a society engaged in intense conversation about the formation of culture. Develop and mature by experiencing a situation different from the familiar, by learning under a variety of teaching styles, by encountering a new set of behaviors and beliefs, and by drawing from course offerings and academic expertise unavailable elsewhere. Live in a university residence in Budapest; and visit the Krakow and Auschwitz concentration camps, Transylvania (Romania), Croatia, and the Ukraine. (Fall semester)

Council for Christian Colleges and Universities Programs

CCCU programs are offered in the fall and spring semesters for junior and senior students with a minimum GPA of 2.75, unless otherwise noted. Participating students earn 16 credits.

American Studies Program (ASP) Founded in 1976, the American Studies Program has served hundreds of students from member institutions as a "Washington, D.C. campus." ASP uses Washington as a stimulating educational laboratory where collegians gain hands-on experience with an internship in their chosen field. Internships are tailored to fit the student's talents and aspirations and are available in a wide range of fields. They also explore pressing national and international issues in public policy seminars that are issue-oriented, interdisciplinary, and led by ASP faculty and Washington professionals. ASP bridges classroom and marketplace, combining biblical reflection, policy analysis, and real-world experience. Students are exposed to on-the-job learning that helps them build for their future and gain perspective on the calling of God for their lives. They are challenged in a rigorous course of study to discover for themselves the meaning of Christ's lordship in putting their beliefs into practice. The aim of the program is to help CCCU schools prepare their students to live faithfully in contemporary society as followers of Christ. Students earn 16 semester hours of credit.

Australia Studies Centre* (ASC) Since Spring 2004, the CCCU has partnered with the Wesley Institute for Ministry and the Arts in Sydney, Australia, to offer the Australian Studies Centre. Every student is required to take the courses Indigenous History, Culture, and Identity; and The View from Australia: Issues in Religion, Politics, Economics, and Cultural Values. Additionally, students choose from electives in theology/ministry, music, drawing/graphic design, dance and/or drama. Home stays, service learning, and travel around Australia are important components of ASC. Students also come to know the traditions of Aboriginal people during an Outback excursion and spend the last week of each semester traveling to New Zealand to meet with Maori people, explore the beautiful terrain, and compare and contrast the two cultures of their off-campus semester. ASC students receive 16 credits.

Contemporary Music Center (CMC) The Contemporary Music Center provides students with the opportunity to live and work in community while seeking to understand how God will have them integrate music, faith, and business. Both interdisciplinary and multidisciplinary in nature, the CMC offers two tracks: the Artist Track and the Executive Track. The Artist Track is tailored to students considering careers as vocalists, musicians, songwriters, recording artists, performers, producers, and recording engineers. The Executive Track is designed for business, arts, management, marketing, communications, and other majors interested in possible careers as artist managers, agents, record company executives, music publishers, concert promoters, and entertainment industry entrepreneurs. Both Artist and Executive Track students receive instruction, experience, and a uniquely Christian perspective on creativity and the marketplace, while working together to create and market a recording of original music. Both tracks include coursework, labs, directed study, and a practicum. Students earn 16 credits.

Latin American Studies Program* (LASP) Students have the opportunity to live and learn in Latin America through the Latin American Studies Program, based in San Jose, Costa Rica. The program introduces students to a wide range of experiences through the study of the language, literature, culture, politics, history, economics, ecology, and religion of the region. Living with a Costa Rican family, students experience and become a part of the day-to-day lives of Latin Americans. Students also take part in a service opportunity and travel for three weeks to nearby Central American nations. Students participate in one of four concentrations: Latin American Studies (offered fall and spring terms); Advanced Language and Literature (limited to Spanish majors and offered fall and spring terms); International Business and Management (offered only during fall terms); and Tropical Sciences (offered only during spring terms). Students in all concentrations earn 16 credits.

Los Angeles Film Studies Center (LAFSC) Founded in 1991, the Los Angeles Film Studies Center is designed to train students to serve in various aspects of the film industry with both professional skill and Christian integrity. Each semester, students live, learn, and work in L.A. The curriculum consists of two required seminars, Hollywood Production Workshop and Theology in Hollywood, focusing on the role of film in culture and the relationship of faith to work in this very influential industry. Students also choose one elective course from a variety of offerings in film studies, and a film industry internship provides hands-on experience. The combination of the internship and seminars allows students to explore the film industry within a Christian context from a liberal arts perspective. Students earn 16 credits: six from the internship and 10 from seminar study.

Middle East Studies Program* (MESP) This program, based in Cairo, Egypt, engages students in complex and strategic world of the modern Middle East. The interdisciplinary seminars give students the opportunity to explore the diverse religious, social, cultural, and political traditions of Middle Eastern people. In addition to seminars, students study the Arabic language and work as volunteers with various organizations in Cairo. Through travel in the region (typically Israel, Palestine, Jordan, Syria, and Turkey), students experience the diversity and dynamics of the region. MESP encourages and equips students to relate to the Muslim world in an informed, constructive, and Christ-centered manner at a time of tension and change. Students earn 16 credits.

Northern Ireland Semester* (NIS) The Northern Ireland Semester accommodates students from a variety of majors and academic levels and includes a Peace and Reconciliation component that is fitting for its cultural context. In addition, the program offers a service learning component, extensive travel throughout Ireland and Northern Ireland, and general elective courses in history, literature, religion, art, and cross-cultural communication. This program is offered spring semesters only.

Oxford Summer Programme (OSP) This program of the CCCU and Wycliffe Hall, Oxford, is designed for students wishing to gain a comprehensive understanding of the relationship between Christianity and the development of the West and those who wish to do specialized work under expert Oxford academics in the areas of history, religious studies, political theory, philosophy, English, and history of science. The program is structured for rising college sophomores, juniors, and seniors, graduate and seminary students, non-traditional students, teachers, and those enrolled in continuing education programs. Minimum GPA of 2.90 required.

The Scholars' Semester in Oxford* (SSO) This program, based in Oxford, England, is designed for students interested in doing intensive scholarship in this historic seat of learning. Working with academic tutors, students hone their skills and delve into the areas that interest them most. As Visiting Students of Oxford University and members of Wycliffe Hall, students have the privilege to study and learn in one of the university's historic halls. The SSO is designed for students interested in the fields of theology, biblical studies, education, science, premed, psychology, business, and the humanities. Applicants are generally honors and other very high-achieving students; minimum GPA of 3.50 required. Students earn 17 credits.

Uganda Studies Program* (USP) Uganda has become an economic and public health model in its region. The USP offers students the opportunity to get a personal look at the country's function and influence. Uganda Christian University (UCU) serves as the base of study for students in the USP. Set on the outskirts of the capital city, Kampala, this rapidly growing institution brings USP students together with the UCU Honours College. A variety of courses taught by local faculty in the English tutorial tradition will immerse students in a uniquely African education and present many insights into African life. Home stays, travel, service learning, and daily interaction with Honours College students form the backbone of the USP experience. Students choose either the Uganda Studies Emphasis or the Intercultural Ministry and Missions Emphasis. In addition to the foundation experiential course, students will choose from an approved selection of courses from the UCU Honours College to earn up to 16 credits.

Other Approved Programs

Au Sable Institute of Environmental Studies The Au Sable Institute offers field-based courses at two primary campuses, one in the Great Lakes Forest near the middle of the North American Continent; the other on the Puget Sound on the edge of the Pacific ocean north of Seattle, Washington. The Institute also has a program at ECHO in North Fort Myers, Florida. There are three-week and five-week summer sessions. Courses can be applied toward meeting Dordt University graduation requirements in several majors.

Au Sable courses and Dordt courses can also be used to meet requirements for certificates issued by Au Sable Institute in the following areas: naturalist, land resources analyst, water resources analyst, and environmental analyst. Au Sable fellowships and grant-in-aid are available to Dordt students. (Summer)

Creation Care Studies Program* (CCSP) A field-based education that explores Christian responsibility in a fragmented world, a world marked by poverty, hostility, environmental demise, opportunism, and social disintegration. While living in Belize, students talk with community leaders, work with non-government organizations, interact with the Belizean people, and explore the remarkable natural resources, including the second largest barrier reef in the world and the rich diversity of a tropical rainforest. A similar program is offered in the South Pacific. The semester curriculum is guided by a view that the world is an integrated web of systems and philosophies that cannot be separated from each other. (Fall and spring semesters)

New York City Semester (NYC) New York City (NYC) Semester at The King's College immerses students in a unique academic experience. At the campus in Manhattan's Financial District, students will engage in an exciting and rigorous academic program, learn from award-winning professors while taking advantage of unparalleled networking opportunities, cultural experiences, and more. The NYC Semester program is composed of three tracks in journalism, business, and theatre.

Semester in Oman* (SIO) The Semester in Oman offers an experiential learning environment in which students can love and worship God, engage new ideas, and respond to God's call. The unique environment in Oman affords students the opportunity to build relationships with Omanis, learn about the Middle East and Islam, and to cultivate an appreciation and sensitivity to the cultural surrounding. Students who engage the Muslim world will be better equipped to join efforts for peace and understanding.

Semester in Scotland* (SIS) The Semester in Scotland is designed for students who want to learn more about who God is and who they are through set reading and seminar tutorials. Students will be housed in a fully-equipped and furnished flat/house within close walking distance of the Airdrie RP Church and the Airdrie town centre, and will be expected to become active participants in the church life as a key component of this program. Each week students will visit some of Scotland's famous historical, scenic, and cultural sites. In addition, students will experience a week of trips to Scottish Reformation sites.

Study Abroad Lithuania-LCC International* (SAL) Students participating in this program are fully immersed in Eastern European cultures as they study in an international community and live in the port city of Klaipeda. Students are housed in one of our residence halls with three international roommates. Taking a wide variety of courses with their Eastern European peers exposes students to a variety of different cultures and enables them to learn the subject material while at the same time challenging their worldview through classroom diversity and intercultural engagement. In addition to academic learning, students are enabled and encouraged to immerse themselves in the community through volunteer and service oriented opportunities as well as academic internships/practicums. This program has spring, fall, and summer options.

Trinity's Semester in Spain* (TSIS) A semester study program, located in Seville, Spain, offers beginning, intermediate, and advanced courses in Spanish studies. Students live with a Spanish family for the entire semester and may choose to engage in optional service-learning experiences. Two summer terms are also offered. (Fall, spring, summer)

Veritas Christian Study Abroad* (VCSA) This program takes place in Cape Town, South Africa, the nation's oldest city. Students on this program will take a Cross-Cultural Leadership course and participate in a Missions/Service Learning Practicum through Veritas Christian Study Abroad. Students can then choose from a variety of different courses offered at the University of Cape Town (UCT), South Africa's oldest university and one of the continent's leading teaching and research institutions. This program is a great option for STEM majors.

World Journalism Institute (WJI) The World Journalism Institute was established to help train young Christians who can write well, observe keenly, and think biblically. For nearly 20 years, WJI has held its journalism courses in places like Dordt University, New York City, Washington, D.C., Los Angeles, and Asheville. Drawing its faculty from the ranks of working journalists as well as academic journalists, WJI offers summer courses with two to three weeks of classroom instruction and field-based writing assignments. The WJI summer courses offer 3-4 credits. (Summer)

Special Topics Off-Campus Program In addition to the above list of approved programs, students may apply to participate in other off-campus programs to meet specifically defined learning objectives. Interested students must submit a written request that clearly indicates their learning goals and how this particular program meets these goals more effectively than any of the existing approved programs. In addition, the student's advisor and/or major department must recommend their participation in this off-campus program. The coordinator for off-campus programs and the registrar will grant approval for participation on a case-by-case basis.

Academic Policies

Academic Standing A student is expected to maintain a minimum cumulative GPA of 2.00 to graduate. Students needing extra assistance in the form of individual tutors, study skills, time management, etc. should contact the staff of the Academic Enrichment Center, located in the lower level of the library. Students will be notified when they are not meeting the graduation minimum and will be expected to seek the necessary assistance. Academic standing is determined by the following:

	Academic Alert	Academic Probation	Academic Suspension
Total Credits Earned	Cumulative GPA is below	Cumulative GPA is below	Cumulative GPA is below
0 to 24	2.00	1.60	1.00
24 to 54	2.00	1.80	1.40
54 to 84	—	2.00	1.60
84 or more	—	2.00	1.80

Academic Alert Students who finish a semester with a cumulative GPA below the graduation requirement will be alerted to their academic status at the beginning of the following semester. Students will be informed of the support services available and encouraged to make use of them. Academic alerts may also be issued during a semester when an instructor reports that a student is in danger of failing his or her course. Academic alerts do not result in any additional restrictions of activity or loss of financial aid but are intended to inform students of their current situation so they can take action to correct it.

Academic Probation Students who finish a semester with a cumulative GPA below the specified standard will be placed on academic probation. Students are notified by letter when placed on probation. The academic standing committee will set certain requirements for a student on probation, including a minimum GPA to be attained in the following semester. A student who has been placed on academic probation and fails to meet the requirements established by the committee the following semester will be subject to academic suspension. Probation may result in the loss of athletic eligibility and certain financial aid.

Academic Suspension Students who finish a semester with a cumulative GPA below the specified standard are subject to academic suspension from the university for a period of one semester. Students suspended from the university will be notified of their suspension immediately in writing and may be given an opportunity to file a letter of appeal prior to the start of the next semester. Students filing an appeal must do so in writing to the registrar by the time indicated in the notification of suspension. The letter of appeal should explain the situation leading up to the suspension, including extraordinary circumstances such as serious illness, injury, or family crisis, and include a specific plan for correcting the problems. Students allowed to return on the basis of an appeal will be placed on academic probation as described above. Students allowed to return on appeal will be subject to suspension without appeal or dismissal if they ever fail to meet the terms established by the academic standing committee. Students who do not file a letter of appeal or whose appeal is not granted may apply for readmission after a lapse of one semester. Readmission is not automatic but is based on evidence that the circumstances leading up to the suspension have been resolved. Any student, regardless of prior academic standing, who receives less than a 1.00 GPA in any given semester is subject to academic suspension at the end of the semester.

Academic Dismissal Students who have been suspended and readmitted and who fail to meet the requirements specified by the academic standing committee will be subject to permanent academic dismissal. Any full-time student who earns no grade points in any given semester is subject to permanent academic dismissal.

Audit and Institutional Visitor Policies Full-time students may audit a course at no additional charge provided they do not go into an overload. Part-time students and students who will go into an overload may audit courses at the overload tuition rate. Students auditing a class are expected to attend lectures, do the readings, and participate in all in-class activities, and *may* participate in other activities. No credit will be given for audits, but an official record with grade of AU will be recorded for audited courses.

On a space-available basis, members of the community are welcome to visit classes at the visitor rate. Registration is subject to approval by the course instructor and registrar, and no official academic record will be kept. A maximum of one course per semester may be visited; applied courses (such as music lessons and ensembles or labs) may not be visited.

Class Attendance Students are expected to attend all class and lab periods. Penalties for absence are left to the individual instructors. The instructor may lower a student's grade if there have been excessive unexcused absences. No allowed number of skips is permitted.

Credits All credit at Dordt University is given in semester hours and, unless noted differently in the course description, will count toward graduation. Each semester hour requires one period per week of class work and approximately two hours per week of preparation.

Dropping Courses Changes in registration must be completed during the add/drop period (within one week after the opening of a fall or spring semester, within the first three days of a summer session). Courses dropped during the add/drop period do not appear on the student's transcript. After the add/drop period, a student may withdraw from a course with permission of the instructor and registrar until the two-thirds point of the semester is reached. Withdrawn courses appear on a transcript with a grade of W. All courses dropped after the two-thirds point of the semester will be recorded as F.

Enrollment in Other Schools Students who are enrolled at Dordt University will not be permitted to take work for academic credit in the same semester in other schools without permission from the registrar. In no case will students be permitted to carry an academic load greater than that stated in the catalog. The registrar must approve in advance all courses taken at other institutions.

Dordt University does not offer undergraduate correspondence courses. However, if students plan to enroll in a correspondence course offered by another college or university, they must have the course approved by the Office of the Registrar in advance.

Grade Point Average Students must have a minimum cumulative GPA of 2.00 in courses taken at Dordt University to meet graduation requirements. The GPA is determined by dividing the total number of grade points by the total number of hours attempted.

A grade of F in a course will be computed in the student's GPA (this refers to both regular courses and pass/fail courses); a student who withdraws from a course prior to the expiration of 10 weeks will not have the W computed in his/her GPA.

Grade Reports First semester mid-term grades are reported to new students. These are not part of the permanent record but serve as an indicator of student progress. Mid-term grades are obtained from the student's advisor. Final grades are released by the Registrar's Office as soon as possible after the close of each semester.

Grading System The following grading system is in effect at Dordt University:

Grade	Points Per Hour	Description
A	4.00	Exceptional
A-	3.67	
B+	3.33	
B	3.00	Good
B-	2.67	
C+	2.33	
C	2.00	Graduation level
C-	1.67	
D+	1.33	
D	1.00	Unsatisfactory
D-	0.67	
F	0	Failure
P	0	Pass
W	0	Withdrawn
WM	0	Withdrawn - Medical Withdrawal
AU	0	Audit

Graduation Students must make application for graduation the semester prior to their graduation. Commencement exercises are held only at the end of the spring semester. In order to participate in the commencement exercises, the student must have completed all coursework for the degree. Requests for exceptions must be brought to the curriculum and academic policies committee via the registrar prior to February 1. There are no exceptions for the associate degrees.

Individual Studies Courses Individual Studies 391, 392, and 393 courses are offered by many departments to provide properly qualified students the opportunity to do intensive work in a subject not normally included in the regular course offerings, or to pursue in depth a topic encountered as part of previous studies, or to engage in experiential education projects. The individual studies courses allow for greater flexibility of program as well as greater responsibility for the student in the learning process. Options within the individual studies concept include research, practicum, independent study, service-learning, readings, and performance. It is understood that the responsibility for learning will be on the student—it is not a tutorial program.

Students who wish to enroll in an individual studies course must complete a course proposal form that may be obtained from the Registrar's Office. In the written proposal the student will describe in some detail the object or goal of the study, the procedures to be followed, the materials to be used, a projected product or outcome, and the method of evaluation. The faculty project supervisor must sign the proposal. Completed proposals must be returned to the registrar for approval by the deadline for adding courses.

If a proposed individual studies project is interdepartmental or falls within a department that does not have an individual studies option, the student may consult the registrar for permission to register for Individual Studies 391, 392, or 393. (See page 40 for individual studies policies.)

Official Transcripts Requests for transcripts should be submitted well in advance of the time they are required by the student. Transcripts will not be made during the week of registration or at the time semester grades and reports are being processed. A transcript will be released only if all accounts have been settled with the university. Transcripts are released only with the written permission of the student. Transcripts will not be sent to employers or other agencies without the permission of the student. Dordt University recognizes and desires to protect student rights of privacy, rights of access to educational data, and the right of challenging the contents of records for inaccurate or misleading information. Most records pertaining to the education of an enrolled student are open to the student upon request. Records may be released to specified persons by written consent of the student. University policies for the privacy rights of students and parents are in compliance with the Family Educational Rights and Privacy Act of 1974. Inquiries concerning compliance should be directed to the provost.

Online Courses Students enrolled full-time in one of Dordt University's on-campus degree programs may enroll in courses offered online by Dordt University but must take a minimum of twelve credits per semester of on-campus face-to-face courses. Students may request exceptions from the registrar to take fewer than twelve credits in face-to-face courses when meeting that requirement is not possible.

Participation in the Assessment Program Dordt University has a comprehensive assessment program to evaluate student learning. Assessment activities are an important part of the total educational program. They are scheduled into the academic calendar and embedded in academic programs. The various facets of assessment involve academic skills, programs, and majors, and the educational goals of the Core Program. Dordt University and its faculty are dedicated to evaluating the quality and effectiveness of all facets of its educational program. The purpose of assessment is to help make improvements in curriculum, student learning, and teaching.

Students will be required to participate in assessment activities. Baseline data will be collected at the freshman level, and additional assessment will occur throughout the student's academic career. The number and type of assessment activities may vary from student to student.

Pass/Fail Option Sophomores, juniors, and seniors have the option of selecting elective courses on a pass/fail (P/F) basis. The pass/fail option was adopted to provide flexibility in program planning and to encourage students to explore many interests outside of their normal program without the worry of overload or about the effect of the grade on their GPA. The following policies govern pass/fail courses:

1. A maximum of 15 credits of P/F work will apply to the 124 credits required for a bachelor's degree; a maximum of 8 credits of P/F work will apply to the 60 credits required for an associate's degree.
2. Students successfully completing a P/F course will have a grade of P recorded on their transcript. They will receive credit for the course, but no grade points. Thus, a grade of P will have no effect on the student's GPA.
3. Students failing a P/F course will have a grade of F recorded on their transcript. This F will be calculated the same way as an F under the normal grading system. Thus, a failing grade in a P/F course will affect the student's GPA.
4. Students taking a course P/F are expected to fully participate in the course. Instructors are not explicitly notified of the students taking the course pass/fail, but that information is available to them upon request.
5. Students who receive a P in a P/F course may not repeat the course on a graded basis.
6. Only elective courses may be taken P/F. Courses required for a student's Core Program, major, or minor may not be taken P/F.
7. Departments have the prerogative to identify courses that should not be P/F.
8. Changes from A-F to P/F grading and from P/F to A-F grading may be made in the Registrar's Office as follows:
 - P/F to A-F grading – any time prior to the last full week of classes by completing a form in the Registrar's office
 - A-F to P/F grading – any time during the first two weeks of the semester by contacting the Registrar's office

9. Students must petition the Registrar's Office to have a course revert to the original grade earned when, due to a change in major, a course previously taken P/F becomes part of the student's major.

Registration Registration takes place at the beginning of each semester. Students will be sent instructions and appointments several weeks prior to the registration dates.

Registration is not completed until tuition and fees have been paid. A late registration fee is charged if registration is not completed on the designated registration day each semester.

Repeating Courses Any course with a grade of B- or lower may be repeated. The original grade remains on the transcript with a reference to the repeated course. Only the last instance of the course on the transcript is factored into the cumulative GPA.

Residence Requirement A minimum of eight semesters of full-time study is required for the bachelor's degree and four semesters for the associate's degree. A maximum of eight credits (half of a typical full-time semester) of overload work will be applied toward the residence requirement (see page 41, Student Load). Requests for an accelerated program are based upon equivalent residency for approved transfer or summer study and must be submitted to the registrar at least one year prior to graduation.

A minimum of 30 credits shall be earned in residence at Dordt University. A minimum of six credits from upper-level courses in the major and nine credits from the Core Program curriculum must be completed in residence at Dordt University. If only 30 credits are earned at Dordt University, the credits normally shall be earned in full-time residence during the final academic year. The curriculum and academic policies committee may grant nontraditional students exception to the full-time residency requirement.

Under normal circumstances, the final 30 credits toward the Dordt University degree shall be completed at Dordt University or in an off-campus program sponsored by Dordt University. Students may request special permission from the registrar to complete final credits at another college. Up to 30 credits may be granted if a minimum of 90 Dordt University credits has been completed; up to 15 credits may be granted if a minimum of 60 Dordt University credits has been completed. These credits normally are taken at four-year colleges or universities. Permission is not automatic but is contingent upon the rationale of the request. A maximum of 12 of the final 30 credits or six of the final 15 credits earned off campus may be applied to the student's major requirements with written approval from the major department. Appeals may be submitted to the curriculum and academic policies committee.

Service-Learning Courses Service-Learning 281, 282, and 283 courses may be directly connected to courses in and across departments, or students may choose to participate independently in service activities with a select community organization under the supervision of a faculty/staff member. Service-Learning courses allow for greater flexibility of program as well as greater responsibility for the student in the learning process.

Service-Learning is an educational method and experience:

- through which students learn and develop through active participation in thoughtfully organized service experience that meet actual community needs
- that is integrated into the student's academic curriculum or provides structured time for a student to think, talk, or write about what the student did and saw during the service activity
- that provides students with opportunities to use newly acquired skills and knowledge in real-life, problem-solving situations in the community
- that enhances student learning beyond the classroom and fosters a clearer sense of servanthood and living as kingdom citizens.

Students who wish to enroll in a service-learning course must complete a course proposal form obtained from the Registrar's Office. In the written proposal, the student will describe in detail the community setting for the project, the student's learning goals, the service activities provided, the plan for reflection activities, and the method of evaluation. The faculty project supervisor must sign the proposal. Completed proposals must be returned to the coordinator of community-based learning and the registrar for approval by the deadline for adding courses.

If a proposed service-learning is interdepartmental or falls within a department without an individual studies option, the student may consult the registrar for permission to register for individual studies.

Individual studies courses and service-learning courses are governed by the following policies:

1. They may have 1-3 credits as follows: 281 and 391, one credit; 282 and 392, two credits; and 283 and 393, three credits.
2. Individual Studies: Second semester freshmen and sophomores may take 391 courses; juniors and seniors 391, 392, and 393 courses. The registrar may grant exceptions.
Service-Learning: First semester freshmen may take 281 courses; second semester freshmen, sophomores, juniors and seniors may take 281, 282, and 283 courses (the registrar may grant exceptions).
3. A student must have a minimum 2.00 cumulative GPA to enroll in 281 and 391; and 2.25 for 282, 283, 392, and 393.

4. A maximum of nine individual studies/service-learning credits may be applied to the B.A. degree; a maximum of four credits to the A.A. degree.
5. Students may enroll in a course more than once. For example, a student may enroll in Business Administration 391 or 392 or 393 more than once. Not more than four individual studies/service-learning credits may be taken in a semester.
6. Normally, an individual studies/service-learning course should be completed in the semester of enrollment, but with advance notice, the course may be spread over the first and second semesters of the year. Register for the course only in the semester that the course will be completed.
7. Individual studies courses 392 and 393 and service-learning courses 282 and 283 are open to students who have had extensive previous course-work in the department.

Student Classification Classification is made at the end of every semester and is determined by the number of credits successfully earned:

Sophomore24 credits
 Junior54 credits
 Senior.....84 credits

Student Load Since 124 credits are required for bachelor's degrees and 60 credits are required for associate's degrees, students who plan to complete these degrees in the standard amount of time must average 15 to 16 credits per semester. Students must be enrolled in a minimum of 12 credits per semester to be considered full-time. Students registering for more than 15 credits should consult their academic advisor.

The following policies, monitored by the registrar, govern the maximum student load:

1. The normal maximum student load for all students is 18.5 credits.
2. First semester freshmen admitted with a high school GPA below 2.25 or a composite ACT score below 19 (SAT I score below 920) are limited to 14 credits.
3. Second semester freshmen, sophomores, juniors, and seniors with a Dordt University GPA of 3.00 or better may register for an overload with the permission of their academic advisor and the registrar. Only under rare circumstances will a student be allowed to register for 22 or more credits.
4. No more than a total of eight credits earned in excess of 16 credits per semester will be applied to the residence requirement.

Withdrawal from School A full-time student who wishes to withdraw from school must obtain the necessary withdrawal form from the Student Services Office. The form must be signed by representatives from the Student Services, Financial Aid, Registrar, and Business Offices. Refunds are based upon the date of approval. Students who withdraw before the end of the semester will receive a grade of W in each course. Students who withdraw without obtaining signatures on the withdrawal form and turning it in to the Business Office will receive a letter grade of F for all courses. Part-time students must notify the registrar of their withdrawal. Be advised that withdrawing may affect your financial aid.

Withdrawal and Reinstatement - Military Service Students called to active duty in the armed forces of the United States will be allowed to withdraw from Dordt University without penalty upon presenting an official copy of their military orders to the Registrar. This must be done at the time a student is required to stop attending classes. This policy also applies to spouses of soldiers called to active duty.

Dordt University will refund 100% of tuition for the term that the student departs. This refund will be sent to the student or can be applied to a future term. For students who have room and/or board contracts in force, the cost of room and/or board will be reimbursed on a pro-rated basis.

Students who withdraw before midterm will receive normal withdrawal notations (e.g. W, Withdrew grades) on the transcript. After midterm, students may, with the permission of the appropriate instructor, exercise one of two additional options: 1) receive final grades earned as of the date of withdrawal, if work of sufficient quantity and quality has been completed to warrant a passing grade for the term; or 2) receive an Incomplete grade for one or more courses. Students who exercise one of these two additional options are subject to all other faculty policies regarding those grades and will not receive a tuition refund for those courses in which a final grade or Incomplete is assigned.

Students whose absence from the University results from being called to active duty for more than 30 days will be reinstated at the University with their same academic status if: 1) they provide notice of such service, and other documentation required by law, to the Registrar; 2) within three years of their completion of service (or within two years after any period necessary to recover from an injury incurred or aggravated during such service) they notify the Registrar in writing of their intent to return; and 3) the cumulative length of all absences from the University for service in the armed forces of the United States does not exceed five years.

Undergraduate Academic Offerings

This section contains descriptions of programs, majors, minors, areas of concentration, fields of specialization, and courses. Semesters following course titles indicate when each course is normally offered. On rare occasions, a course may not be available when indicated because of low enrollment or unexpected staffing changes.

Courses listed as Fall Odd and Spring Even are scheduled to be offered during the 2019-20 academic year, i.e., fall 2019-20 is Fall Odd, spring 2019-20 is Spring Even.

Academic Enrichment Center

- 100 **Essentials for Academic Success (2)**..... Fall
 The primary goal of this course is to help you transition well to the college environment. In workshop style, you will practice and hone your skills in organization, time management, communication, reading, writing, test preparation, and overall self-management. This course seeks to connect you with resources that will equip you not only to achieve academic success, but also to contribute to the Dordt community and to the broader kingdom of God. Prerequisite: ASPIRE program admission; or permission from the Academic Enrichment Director.

Accounting

- General Major–** Business Administration 100, 101, 201, 202, 301, 302, 305, 310, 311, 312, 313, 314, 315, 316, 320, 351; Economics 202, 203; one elective course in economics; Statistics 131.
- General Minor–** Business Administration 201, 202, 310, 311, 313; Business Administration 307 or 316.

Actuarial Science

- General Major–** Business Administration 201, 202, 305, 325; Computer Science 115; Economics 202, 203; Mathematics 152, 153, 201; Statistics 132, 148, 202, 203, 215, 216, 218, 220, 290, 351, 352, 353; one course from Business Administration 327, Computer Science 250, English 305 (all three courses are strongly recommended).
- General Minor–** Mathematics 152; Statistics 148, 215, 216, 218.

Students must complete two of the following three tracks (Society of Actuaries Certified Validation by Education Experience Tracks):

- A. Statistics 131 or 132, 202.
- B. Economics 202, 203.
- C. Business Administration 305, 325. (Note: Business Administration 201 is a prerequisite for Business Administration 305.)

Agriculture

The objectives of the course requirements in agriculture, and the other majors as well, are to enable students to develop a basic understanding of the discipline, to learn skills that will equip them to serve in God's kingdom in this area, and to prepare them for future learning experiences.

- General Major–** Foundation (common to all emphases): Agriculture 101, 105, 111, 221, 290, 361, 370 or 371, 380, 381.

Students must select one of the following emphases:

- Agri-business:** Foundation; Chemistry 110 or 111; five courses from Agriculture 222, 223, 224, 225, 226, 312; one course from Agriculture 201, 232, 233, 234, 235, 238, 251, 255; Business Administration 201, 202, 206; Economics 202. Agriculture 373 recommended.
- Animal Science:** Foundation; Chemistry 110, 122 or Chemistry 111, 225*; Biology 125, 302 or 310*; Agriculture 232, 234, 291, 335; one course from Agriculture 233, 235, 238; two courses from Agriculture 331, 332, 336. Agriculture 373 recommended.
 *Those considering graduate school should take Biology 310 instead of Biology 302 and Chemistry 111, 225 instead of Chemistry 110, 122.

Pre-vet students must consider the entry requirements of their preferred school of Veterinary Medicine. They must take Biology 310 instead of Biology 302 and may take Biology 324 instead of Agriculture 335. They must take Chemistry 111,

212, 225, 261 and may need Chemistry 321 or 322. Additional courses in mathematics or statistics, physics, and biology may be needed..

A poultry track is available in the Animal Science emphasis, which includes summer courses offered by the Midwest Poultry Consortium's Center of Excellence (COE) Program, along with six required internship credits. See the department for details.

Biotechnology: Foundation; Chemistry 111, 225, 261, 321 or 322, 323, 361; Biology 125, 310, 324, 335; three credits from Agriculture 201, 232, 234, 291, 315, 316, 331, 332, Biology 319. Students in the biotechnology emphasis must have a biotechnology component in Agriculture 361 and may substitute Agriculture 373 for Agriculture 380 and 381 in the foundation requirements.

General: Foundation; Chemistry 110, 122 or Chemistry 111, 225*; Agriculture 201, 232; six credits from Agriculture 233, 234, 235, 238, 291, 331, 332, 335, 336, Biology 302; six credits from Agriculture 251, 255, 311, 315, 316, 350, Biology 125, 215, 319. Agriculture 373 recommended.

*Those considering graduate school should take Chemistry 111, 225 instead of Chemistry 110, 122.

Missions: Foundation; Chemistry 110 or 111; nine credits from Agriculture 201, 226, 232, 233, 234, 235, 238, 251, 255, 311, 350, BY 291 Sustainable Tropical Agriculture (Gordon College); Theology 231, 323, 331, 332; one course from Theology 211-217; CORE 270 or one course from CORE 281-289 or participation in an off-campus program. The department encourages students to consider a community development minor.

Plant Science: Foundation; Chemistry 110, 122 or Chemistry 111, 225*; Biology 125, 319; Agriculture 201, 311, 335; Agriculture 251 or 255; Agriculture 315 or 316; one course from Agriculture 341-350. Agriculture 373 recommended.

*Those considering graduate school should take Chemistry 111, 225 instead of Chemistry 110, 122 and may take Biology 324 instead of Agriculture 335.

General Minor– Agriculture 101, 105, 111, 221, 290; Chemistry 110 or 111; CORE 260 or Economics 202.

Associate of Arts Degree Options Area of Concentration (Associate of Arts in Agriculture)
See the "Academic Program" section for the Core Program for all A.A. programs (pages 22-23).

Agriculture 101, 105, 111, 221, 290; Agriculture 201 or 232; three elective credits of agriculture; Chemistry 110 or 111; CORE 260 or Economics 202; CORE 200 (fulfills Core Program distribution elective).

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 86-99, Teacher Preparation Program.

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| 101 | Biology, Care, and Production of Domestic Animals (4) | Spring |
| | History, management, physiology, breeding, lactation, feeding, health, and products of cattle, swine, sheep, poultry, companion animals, and other species as they relate to humans and the creation. Three lectures and one three-hour laboratory period per week. | |
| 105 | Orientation and Agricultural Safety (1.5) | Fall, Spring |
| | Classroom discussion, lecture, and practical experience are used to familiarize the students with the Agriculture Department, Agricultural Stewardship Center (ASC), and the greenhouse to develop understanding and competency in operating equipment at the ASC and classroom labs. Students will receive instruction in agricultural safety to develop an understanding and competency in the areas of current agricultural production practices and safety procedures. Students will be certified in CPR and complete first aid training. The course meets for seven weeks. Two lectures and one three-hour laboratory per week. | |
| 111 | Introduction to Plant Science (4) | Fall |
| | Students will study plants, their care and use within agroecosystems, as well as their role in creation. Students will be introduced to how agriculture both influences and is influenced by human cultural development, how humankind's understanding of stewardship influences creation care, and how plants serve as sources of food, fiber, fuel, and fascination. Plant biology concepts including plant structure and function, growth, development and reproduction, and plant/environment interactions will be introduced. The course will demonstrate how these biotic and environmental factors integrate with plant biotechnology, crop breeding and propagation, protection, cropping systems, and crop economics and utilization. Three lectures and one three-hour laboratory per week. | |
| 201 | Nature and Properties of Soils (3) | Spring |
| | A comprehensive introduction to the field of soil science with an emphasis on scientific principles and their application in solutions to practical soil management problems. Two lectures and one three-hour laboratory per week. Prerequisites: Agriculture 111 or Biology 215; Chemistry 110 or 111. | |
| 221 | Introduction to Farm Business Management and Accounting (4) | Spring |
| | The study of the principles, financial statements, and analyses of farm business data using actual farm data and scenarios. Topics include | |

decision making processes, whole business planning, goal setting, record keeping, balance sheets, budgeting, cash flow statements, income statements, budgeting, balance sheets, income statements, cash flow statements, investment analysis, tax planning and risk analysis. Three lectures and one three-hour laboratory per week. Prerequisite: sophomore standing. Business Administration 202 or Core 260 recommended.

- 222 **Agriculture Law (3)**Fall Odd
An overview of legal issues as they relate to farm and agribusiness management, specifically focusing on the practical application of contracts, negligence, debt instruments and commercial transactions of the farm, agribusiness and food production. Selected state and federal laws, basic animal and food laws, including regulation of farm to table activities, and environmental and social regulations will be considered. Prerequisite: Agriculture 221.
- 223 **Agriculture Finance and Investment Analysis (3)**.....Fall Even
This course will incorporate theory and applied experiences to initially address the nature, scope and principles of financial management. Additional topics include: credit risk assessment; capital structure, leverage, and financial risk; time value of money; lender-borrower relationships and loan servicing practices; and ownership and leasing of equipment and farm land. Prerequisite: Agriculture 221.
- 224 **Agriculture Sales (3)**.....Spring
Investigate the foundations of professional selling and the connection of marketing with sale in agriculture, planning and selling strategies, prospecting and understanding customers. The components of the face-to-face sales process – opening the call, identifying needs, communicating value, handling objections and closing the call – are the focus of study and practice for the majority of the course. Design strategies for online sales of agriculture products and services will also be explored. Prerequisite Agriculture 221. Business Administration 206 recommended.
- 225 **Agriculture Risk Management (3)**.....Spring Even
This course will investigate the major types of agriculture risk along with corresponding mitigation strategies. Study of associated theory and applied practices using recommended steps within strategic risk management frameworks will enable students to develop relevant and practical risk management plans. Strategies to manage alternate forms of risk will be applied to the content and practices of risk management in agriculture. Prerequisite: Agriculture 221.
- 226 **International Business Strategies in Agriculture (3)**Spring Odd
An examination of core concepts and techniques for entering the international marketplace. Emphasis is on the effect of sociocultural, demographic, economic technological, and political-legal factors in the foreign trade environment associated with trade in food and agricultural products between countries. The course will include trade development to assist development in lesser developed countries. Prerequisite: Agriculture 221.
- 232 **Feeds and Feeding (3)** Fall
The evaluation, composition, and values of feedstuffs as they relate to animal nutrient requirements will be considered. The basics of ration formulation and feeding management will be covered for the major livestock species. Two lectures and one three-hour laboratory per week. Prerequisites: Agriculture 101; Chemistry 110 or 111.
- 233 **Principles of Dairy Science (3)**.....Spring Even
Dairy reproduction, physiology, lactation, breeding, nutrition, and genetics will be discussed with an emphasis on scientific principles and their application to dairy science. Two lectures and one three-hour laboratory period per week. Prerequisites: Agriculture 101; Chemistry 110 or 111. Agriculture 232 recommended.
- 234 **Principles of Animal Health (3)**Spring Odd
Animal care and facility sanitation will be discussed, focusing on care, disease prevention, disease detection, animal treatment, pharmacology, and health programs. Three lectures per week. Prerequisites: Agriculture 101, 232; Chemistry 110 or 111. Biology 302 or 310 recommended.
- 235 **Principles of Swine Science (3)**Fall Even
A study of swine care and management, physiology, diseases, equipment, reproduction, and nutrition. Two lectures and one three-hour laboratory per week. Prerequisites: Agriculture 101; Chemistry 110 or 111. Agriculture 232 recommended.
- 238 **Beef and Sheep Science (3)**Fall Odd
A study of beef and sheep management, production, physiology, nutrition, reproduction, diseases, equipment, facilities, and care. Two lectures and one three-hour laboratory per week. Prerequisites: Agriculture 101; Chemistry 110 or 111. Agriculture 232 recommended.
- 241 **Defender Cattle Investment (1)**..... Fall, Spring
Students will implement a student-run cattle investment activity to provide applied experiences that help students learn and develop expertise through buying and selling cattle in a stewardly and profitable manner utilizing community advisors and a faculty advisor. The course will continue over both semesters and students will be encouraged to sign up for the class both semesters. Prerequisites: Agriculture 101, 221; junior or senior standing. Corequisites: Agriculture 238, 312; or permission of instructor.

- 251 **Horticultural Plants (3)**Spring
The study of greenhouse, vegetable, and ornamental plants. The aesthetics, culture, physiology, and propagation of horticultural plants will be examined. Two lectures and one three-hour laboratory per week. Prerequisite: Agriculture 111 or Biology 215.
- 252 **Planning Agriculture Education Programs (3)**Occasional
This course will cover the responsibilities of an agricultural education teacher, curriculum development, experiential learning opportunities including FFA and SAE, and assessment and maintenance of program quality. The course will emphasize the development of a distinctively Christian approach to teaching agricultural education. Students participate in an extensive, 40-clock hour, practicum experience in a local agriculture classroom, prepare a CDE team, and analyze and prepare components of a complete agriculture education program. Prerequisite: admission to the Teacher Preparation Program; or permission of instructor.
- 255 **Forage Crop Management (3)**Fall Even
The production and management of crops for livestock feed are considered, and the establishment, growth, harvesting, preservation, and quality of these crops are examined. Primary emphasis is given to the value of major temperate region grasses and legumes as livestock feed, and the energy, protein, and other nutritional components they supply. The identification of common and alternative forage species is an important component of the course. Two lectures and one three-hour laboratory per week. Prerequisites: Agriculture 101, 111.
- 281- **Service-Learning (1-3)**Fall, Spring, Summer
283 See page 120, Individual Studies
- 290 **Perspectives in Agricultural Policy (3)** Fall
Worldviews relating to contemporary agriculture systems are discussed. In addition to examining historical policies, the participating stakeholder groups and development of domestic and international agricultural policies are also studied. Several views on these topics are examined and a reformed perspective is developed. Two lectures and a one-hour small group discussion period per week. Prerequisites: CORE 140; sophomore standing.
- 291 **Anatomy and Physiology of Animals (4)**Fall Even
The structures and functions of the major body systems will be studied as they work together in the life processes of an animal. The nervous, skeletal, muscle, circulatory, endocrine, digestive, and reproductive systems will be examined. Three lectures and one three-hour laboratory per week. Prerequisites: Agriculture 101 or Biology 125; Chemistry 110 or 111. Chemistry 122 or 225 recommended.
- 302 **Methods of Teaching Agricultural Mechanics (3)**Occasional
Students will practice methods and management techniques in agricultural mechanics laboratories. Emphasis will be on safety, mechanical skills development, and management of students, facilities, equipment, and materials. Students participate in an extensive, 60-clock hour, practicum experience in a local agriculture classroom and laboratory to practice skills necessary to successfully teach agricultural mechanics. Prerequisite: admission to the Teacher Preparation Program; or permission of instructor.
- 303 **Geographic Information Systems and Surveying (4)**Fall Even
An introduction to the acquisition, analysis, display, manipulation, and management of geographic information. Course topics will include geographical data input, storage, maintenance, analysis, and retrieval. Students will utilize common GIS software and associated hardware. An overview of survey methods used to gather and quantify features of physical geography will be included. The course will meet in two studio lab classes to provide an integral learn-by-doing experience applying GPS technology, survey methods, and GIS applications. Application of GIS to agriculture, business, environmental management, and other disciplines will be provided in this course. Prerequisite: sophomore standing or above. [Cross-listed: Business Administration 303, Construction Management 207, Environmental Studies 303]
- 311 **Soil Fertility (3)**Spring Even
An integrated discussion of soil-crop yields relationships with emphasis on the soil as a source of mineral nutrients for crops and the role of fertilizers and manure in crop production. Three lectures per week. Prerequisites: Agriculture 201; Chemistry 110 or 111.
- 312 **Commodity Futures Marketing (3)** Fall
The course will explore agriculture commodity markets in general and specifically commodity futures and options markets. The emphasis will be on major commercial agriculture field crops and livestock. The course will involve study of commodity price behavior and the role of futures markets as an institution in a market economy, as well as the use of futures contracts and options on futures contracts in firm asset and risk management. The mechanics of futures and options trading, basic relationships between cash and futures markets, fundamental and technical behavior of commodity future prices, hedging strategies, futures market regulations, and commodity futures market performance will be examined in light of risk management, stewardship, justice, and market development that show respect and concern for fellow human beings. Prerequisite: Agriculture 221 or Business Administration 206.
- 315 **Entomology and Pest Management (3)**Fall Odd
An introduction to entomology and insect-pest management including insect biology, taxonomy, ecology, life cycles, and integrated pest management. Three lectures per week. Prerequisites: Agriculture 111 or Biology 215; junior standing.

UNDERGRADUATE ACADEMIC OFFERINGS: AGRICULTURE

- 316 **Plant Protection - Weed Science and Plant Pathology (3)**Spring Odd
A study of the major weed and plant pathology principles and theories and their application to the field of pest management. The course will include identification, physiology, ecology, life cycles, and stewardly management practices for important pest species. Three lectures per week. Prerequisites: Agriculture 111 or Biology 215; Chemistry 110 or 111; junior standing.
- 331 **Reproductive Physiology (1.5)**Spring Even
A study of the principles of reproductive physiology and lactation focusing on the major classes of livestock. Students will use these principles to develop an understanding of reproductive management techniques and will examine the ethics of reproductive technologies. Two lectures and one three-hour laboratory per week for seven weeks. Prerequisites: Agriculture 101 or Biology 122; Chemistry 110 or 111. Agriculture 291 recommended.
- 332 **Advanced Animal Nutrition (1.5)**Spring Odd
A problem-solving approach will be taken to examine the nutrient requirements of animals in different production systems. Methods that can be used to meet those requirements will be evaluated. Ration formulation will be discussed as it relates to the different digestive systems and production requirements. Two lectures and one three-hour laboratory per week for seven weeks. Prerequisites: Agriculture 232; Chemistry 122 or 212.
- 335 **Agriculture Genetics (3)**Spring Even
The current understanding of genetics will provide the basis for molecular and population genetic applications in plant and animal breeding systems. The role of genetic change in agriculture production has been, and will continue to be, an influential part of yield, quality and efficiency of production. Two lectures and one three-hour laboratory per week. Prerequisites: Agriculture 101, 111; Biology 125; Chemistry 110 or 111.
- 336 **Meat Science (1.5)**Spring Odd
The processes of converting muscle tissue into meat and factors affecting meat quality will be studied. The role of the producer, packer, USDA, and consumer in quality and safety issues will be examined. Two lectures and one three-hour laboratory per week for seven weeks. Prerequisites: Agriculture 101; Chemistry 110 or 111.
- 337 **ECHO Agricultural Conference (1)**Spring
Participation in the major agricultural development conference held in November in Fort Myers, Florida. The Educational Concerns Hunger Organization hosts this international conference, which focuses on agricultural development, cross-cultural issues, and community development. Prerequisite: sophomore standing.
- 341- **Special Topics (1-3)**Occasional
348 Courses vary from year to year and are designed to meet special student interests and utilize staff strengths and the talents of experts in the community. Each course covers material not usually treated in regularly scheduled courses.
- 350 **Field Crop Production and Management (3)** Fall
Grain and forage production in the North Central Region of the U.S. is investigated using lectures, group projects, field trips, and production and research experiences at the ASC. The role of grains in world food production is examined, and students are challenged to find solutions to the problems frequently associated with grain production. Students collect and analyze field crop data and explore sustainable crop production methods and systems. The investigation of new and innovative crop production strategies is an important component of the course. Two lectures and one three-hour laboratory per week. Prerequisites: Agriculture 105, 221; one course from Agriculture 201, 255, 311, 315, 316.
- 361 **Agriculture Senior Seminar (3)**Spring
An integration of departmental courses, research, and analysis of current topics with emphasis on Christian perspective for persons involved in agriculture. Issues will include government policies, world hunger, the family farm, meat production, and others. Three lectures per week. Prerequisites: CORE 200; junior or senior standing in the agriculture department; or permission of instructor. [Cross-listed: CORE 311]
- 370 **Agroecology (3)** Fall
An introduction to the principles of agricultural ecology with an emphasis on Christian stewardship of God's world. Topics include the development and characteristics of agroecosystems, ecological disturbance and succession, diversity, pest management, nutrient cycling, environmental quality, energy use, climate change, social capital, conservation practices, and global food production. The interaction of agroecosystems with surrounding ecosystems is studied, and the utilization of ecological principles in agroecosystem design and management are examined. Two lectures and one three-hour laboratory per week. Prerequisites: Agriculture 101, 111 or Biology 122, 215 or Environmental Studies 151, 152; junior or senior standing.
- 371 **Agroecosystems Analysis (3)**Summer, Fall
A field-based course in which students visit eight or more agroecosystems and work in teams to understand them, analyze them, and reflect on their sustainability. The course includes pre-class reading and writing assignments, eight intensive days of farm visits and analysis during the summer, and final written assignments due in September. It is a cooperative course involving students and faculty members from

Dordt University, Iowa State University, the University of Minnesota, and the University of Nebraska. It provides Dordt students with a unique opportunity to engage the broader culture and to consider the implications of a Christian view of agroecosystems. Prerequisites: Agriculture 101, 111 or Biology 122, 215 or Environmental Studies 151, 152; junior or senior standing; permission of instructor.

- 373 **Internship (1-3)** Fall, Spring, Summer
Students are given the opportunity to apply the principles of agriculture and business in an off-campus assignment. Prerequisite: sophomore, junior or senior standing.
- 380 **Directed Study-Class Component (.5)** Fall, Spring
Students will receive instruction and guidance for the development of a group agriculture capstone project. Student groups will identify a relevant problem, review background information, develop a project with an advisor, and gain its approval prior to implementation. A Capstone Agriculture Project Handbook will provide guidance for project expectations. Graded on a pass/no record basis. Prerequisites: Agriculture 101, 105, 111; one course from Agriculture 290, 370, 371; junior or senior standing.
- 381 **Directed Study-Project Component (3)** Arranged
A continuation of Agriculture 380. The student groups will implement an approved capstone project, report the results of the project in writing, and give a public oral presentation of their work. A Capstone Agriculture Project Handbook will provide guidance for project expectations. Prerequisite: Agriculture 380.
- 391- **Individual Studies (1-3)** Fall, Spring, Summer
393 See page 120, Individual Studies

American Studies

General Minor- History 201; Art 209; one course from English 201, 202, 203; one course outside the student's major discipline from Economics 309, Political Science 202, 322, Social Work 216; two additional courses outside the student's major discipline from English 201, 202, 203, History 301, 306, 307, 308, Economics 309, Political Science 202, 322, Social Work 216.

Applied Science and Technology

The Applied Science and Technology major is a cooperative arrangement with Northwest Iowa Community College (NCC). Students who have completed programs at NCC leading to an Associate of Applied Science degree in Computerized Manufacturing Technology, Electrical Technology, Industrial Instrumentation and Control, or the former NCC program in Manufacturing Engineering Technology, may enroll in the Applied Science and Technology program at Dordt University to obtain a Bachelor of Arts degree in Applied Science and Technology. (The Applied Science and Technology major has not been examined nor accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology.)

General Major- Foundation (common to all emphases): The Dordt University Core Program requirements; Mathematics 152; Engineering 112, 114, 115, 116, 117, 310; Applied Science and Technology 279, 280.

Students must select one of the following emphases:

Computerized Manufacturing:	Foundation; Computer Science 204, 205; Engineering 204; Physics 215 or Chemistry 110; Physics 216 or Environmental Studies 151.
Electrical Technology:	Foundation; Chemistry 110; Computer Science 115; Engineering 202; Environmental Studies 151.
Industrial Instrumentation and Control:	Foundation; Physics 215 or Chemistry 110; Physics 216 or Environmental Studies 151; two technical electives chosen with the approval of an engineering advisor.
Manufacturing Engineering:	Foundation; Chemistry 110; Computer Science 115; Engineering 202, 204; Environmental Studies 151.

- 271 **Applied Science and Technology Internship (3)** Fall, Spring, Summer
An off-campus experience that is intended to provide the applied science and technology major with the opportunity to apply knowledge, principles, and skills gained in the classroom in an applied science and technology workplace environment. Written and oral summary reports by participants bring reflection on the technical experience into subsequent classes. Graded on a pass/fail basis. Prerequisites: completion of Engineering 114, 115, 116, 117 and an Associate of Applied Science degree.
- 279 **Senior Design I (1)** Fall
The first of two project courses providing students with the opportunity to use, in an integrated manner, the knowledge and skills that

have been acquired to this point in their education. This laboratory course is devoted entirely to the research, planning, analysis, and report writing required in the first phase of the senior design project. Students work in teams of two or three on a project of their mutual interest. Prerequisites: completion of Engineering 114, 115, 116, 117 and an Associate of Applied Science degree. (Applied Science and Technology 279 and Engineering 379 meet together.)

- 280 **Senior Design II (4)**Spring
The second course devoted to senior design project activities. In-class topics will include general topics relating to engineering design such as engineering economics, technical writing, design aesthetics, project planning, engineering statistics, technical literature research, safety, ergonomics, and practical finite element analysis. The lab portion of the course requires students to complete the design, experimentation, analysis, and communication components of their project. Work on the project, while culminating in this course, starts in Applied Science and Technology 279 the previous semester. Teams confer weekly with members of the engineering department staff. Prerequisite: Applied Science and Technology 279. (Applied Science and Technology 280 and Engineering 380 meet together.)

Art

General Major–

- Art History: Art 201, 202, 207, 208, 209, 210, 216, 370; two courses from Art 218, 225, 228, 230, 240; two courses from Art 302, 316, 318, 325, 328, 330, 340.
- Fine Arts Studio: Art 201, 202, 209, 216, 302, 370; two courses from Art 207, 208, 210; two courses from Art 218, 225, 228, 230, 240; two courses from Art 316, 318, 325, 328, 330, 340; one course from Art 295, 352, 366, 368, 375, 378, 380, 390; Philosophy 206.
- Graphic Design: Art 201, 202, 209, 228, 230, 240, 250, 295, 340, 370, 390; Art 225 or 302; Business Administration 206.
- Pre-architectural Design: Art 201, 202, 207, 208, 209, 240, 340, 370, 390; three courses from Art 225, 228, 230, 295, 302; Business Administration 206; Chemistry 109 or 111; Environmental Studies 151, 152; Mathematics 152; Physics 201 or 215; Construction Management 101, 102; Engineering 310, 390; a minimum of nine credits from Construction Management 207, 213, 214, 220, 240, 270, 280, 318, Engineering 112, 114, 115, 116, 117, 202.

- General Minor–** Art 201, 202; two courses from Art 207, 208, 209, 210; two courses from Art 216, 218, 225, 228, 230, 240; one course from Art 302, 316, 318, 325, 328, 330, 340.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 86-99, Teacher Preparation Program.

- 201 **Design Theory (3)** Fall
Manipulation of two-dimensional design through the use of the basic art elements: line, shape, value, color, texture, and space. The course is intended to develop a visual vocabulary and an imaginative approach to design.
- 202 **Drawing I (3)** Fall, Spring
Acquiring the basic skills of drawing through an objective investigation of reality. Common media and tools are used.
- 207 **Art History: Ancient and Medieval (3)** Fall Odd
This course is the first of a three-semester survey of the history of the visual arts. It investigates the role of the visual arts in the historical and cultural development of world civilization between prehistory and the 14th century.
- 208 **Art History: 14th to 19th Centuries (3)** Spring Even
This course is the second of a three-semester survey of the history of art. It covers the history of architecture, painting, and sculpture from the 14th century through the 19th century.
- 209 **Art History: Contemporary Art and Architecture (3)** Fall Even
This is the third course in a historical survey of art and architecture. The course will begin with the foundations of modernism in the last half of the 19th century and then cover the plurality of styles in the 20th century.
- 210 **Non-Western Art History (3)** Spring Odd
This course studies non-European art and culture including Islamic, Japanese, and Chinese art.
- 211 **Teaching Art in the Elementary School (3)** Fall
A course for art majors and minors designed to provide a detailed study of methods, materials, and techniques of art education in the elementary school.

216	Sculpture I (3)	Spring
	An introductory course emphasizing 3-D design and utilizing a variety of materials including clay, wood, plaster, stone, and mixed media.	
218	Ceramics I (3)	Fall
	An introduction to clay and the basic process of slab, pinch, coil, and wheel-thrown constructions. Class size is limited.	
225	Painting I (3)	Fall
	An introduction to painting, emphasizing techniques and methods of communicating ideas visually. Class size is limited. Prerequisite: Art 201 or 202; or permission of instructor.	
228	Printmaking I (3)	Spring
	An introduction to some basic printmaking methods including serigraphy, linocuts, collographs, and intaglio. Class size is limited. Prerequisite: Art 201 or 202.	
230	Photography I (3)	Spring
	An exploration of black and white photography as an art form. Students must provide their own 35mm camera. Class size is limited.	
240	Graphic Design I (3)	Fall
	An introductory class in the use of the Macintosh computer, covering basic layout software, object-oriented drawing software, and a paint program for scanning, image manipulation, and their use in graphic design. Through assignments that address the functional and experimental aspects of typography, students explore the interaction of form and meaning in typographic design. This course provides an initial exploration of visual communication issues and applications along with design methodology. Prerequisites: Art 201, 202; or permission of instructor.	
250	Web Design (3)	Fall
	Using projects that simulate real-world web design situations, learn the basics of organizing, designing, and constructing web-based interfaces common to the professional web design process by using Adobe applications, specifically Dreamweaver. A basic knowledge of Adobe Photoshop is advised and a working knowledge of the Internet and web browsers is recommended. Prerequisites: Art 240; Computer Science 101, 103; or permission of instructor.	
281-283	Service-Learning (1-3)	Fall, Spring, Summer
	See page 120, Individual Studies	
295	Motion Graphics (3)	Spring
	This course is an introduction to the art of 2-D and 3-D digital graphics animation and interactivity for video, Web, and DVD. Students will gain knowledge of digital animation and its history. Projects are centered on getting hands-on experience and will integrate learning with real-world video production. The course also focuses on planning, design, and production using lectures, demonstrations, workshops, and screenings. Students will focus on using the most popular software programs. Prerequisites: Art 240; permission of instructor.	
<i>Note: Courses 302-340 are continuations of the introductory media courses. Each 300-level media course has a corresponding 200-level media course as its prerequisite. Permission of instructor is also required.</i>		
302	Drawing II (3)	Spring
316	Sculpture II (3)	Spring
318	Ceramics II (3)	Spring
325	Painting II (3)	Spring
328	Printmaking II (3)	Fall
330	Photography II (3)	Fall
340	Graphic Design II (3)	Spring
	A continuation of Art 240, students apply their growing knowledge of the interaction between typography and visual form to specific design situations. Type/image relationships are important aspects of this course. Typographic syntax and arrangement are stressed. Design methodology, research, the development of a variety of ideas, and print production technology is emphasized. Prerequisite: Art 240.	
341-348	Special Topics (3)	Occasional
	These courses vary each year and are intended to utilize various staff talents and communal expertise while involving the student in in-depth studies of art and art history.	

UNDERGRADUATE ACADEMIC OFFERINGS: ART

- 352 **Drawing III (3)** Fall
Prerequisites: Art 202, 302; permission of instructor.
- 366 **Sculpture III (3)** Spring
Prerequisites: Art 216, 316; permission of instructor.
- 368 **Ceramics III (3)** Spring
Prerequisites: Art 218, 318; permission of instructor.
- 370 **Senior Seminar in Art (3)** Fall
A critical examination of contemporary problems and trends in the field of art. The course will include readings, discussions, a paper or presentation, critique of current exhibitions, and a senior art show.
- 371 **Art Internship (1)** Fall, Spring
A professional opportunity for the art major to apply the knowledge, principles, and skills gained in the classroom in an actual workplace environment. Prerequisites: level I art course in area of internship (Art 202, 216, 225, 228, 230, 240 or one of the following: Art 207, 208, 209, 210); permission of instructor.
- 372 **Art Internship (2)** Fall, Spring
A professional opportunity for the art major to apply the knowledge, principles, and skills gained in the classroom in an actual workplace environment. Prerequisites: level II art course in area of internship (Art 302, 316, 325, 328, 330, 340 or two of the following: Art 207, 208, 209, 210); permission of instructor.
- 373 **Art Internship (3)** Fall, Spring
A professional opportunity for the art major to apply the knowledge, principles, and skills gained in the classroom in an actual workplace environment. Prerequisites: level III art course in area of internship (Art 352, 366, 375, 378, 380, 390 or three of the following: Art 207, 208, 209, 210); permission of instructor.
- 374 **Art Internship (4)** Fall, Spring
A professional opportunity for the art major to apply the knowledge, principles, and skills gained in the classroom in an actual workplace environment. Prerequisites: level III art course in area of internship (Art 352, 366, 375, 378, 380, 390 or three of the following: Art 207, 208, 209, 210); permission of instructor.
- 375 **Painting III (3)** Fall, Spring
Prerequisites: Art 225, 325; permission of instructor.
- 378 **Printmaking III (3)** Spring
Prerequisites: Art 228, 328; permission of instructor.
- 380 **Photography III (3)** Fall
Prerequisites: Art 230, 330; permission of instructor.
- 390 **Graphic Design III (3)** Fall
A continuation of Art 340, this advanced course presents complex design situations. Students are involved in extended projects such as identity systems with various components including website design, families of package design, utilitarian design or poster designs developed in a series. Students are expected to cultivate and demonstrate a high level of comprehension about the interrelationship between visual form and meaning. Prerequisites: Art 240, 340; permission of instructor.
- 391- **Individual Studies (1-3)** Fall, Spring, Summer
393 See page 120, Individual Studies

Astronomy

- 121 **Solar System Astronomy (4)** Fall Odd
An introduction to the structure and diversity of the solar system, focusing on both the historical development of understanding of our cosmic “neighborhood” from the ancient Greeks to Einstein, as well as recent discoveries and their implications for an improved understanding of our Earth. Students will obtain hands-on experience observing the heavens with naked eye, binoculars, and telescopes. The course involves three lecture hours and three observation/laboratory hours per week. Prerequisite: completion of Core Program mathematics requirement. [Cross-listed: CORE 224, Earth Science 121]
- 122 **Stellar and Galactic Astronomy (4)** Fall Even
An introduction to stellar and galactic astronomy, focusing on the historical development of understanding of the cosmos as well as recent

discoveries and their implications. Topics include the classification and explanation of stars, stellar life-cycles, remnants of stellar collapse (white dwarfs, neutron stars, black holes), galaxies, and cosmology (the study of the universe as a whole). Students will examine origins in light of Scripture and modern scientific evidence. Students will also obtain hands-on experience observing the heavens with naked eye, binoculars, and telescopes. The course involves three lecture hours and three observation/laboratory hours per week. Prerequisite: completion of Core Program mathematics requirement. [Cross-listed: CORE 225]

Biblical Languages

- 111 **Biblical Greek I (4)**Fall Odd
Students are introduced to the basics of biblical Greek and learn the basic forms of the Greek language, a foundational vocabulary, and elementary grammar. The focus of this course is on Greek nouns. Theology 110, 215, 216, and 217 are strongly recommended with Biblical Greek.
- 112 **Biblical Greek II (4)**Spring Even
Continues Biblical Languages 111. Students continue to work on the basic forms of the Greek language, a foundational vocabulary, and elementary grammar. The focus of this course is on Greek verbs. Prerequisite: Biblical Languages 111.
- 211 **Biblical Greek III (3)**Fall Even
Building on the language learned in the first year, students read from a variety of texts and are taught intermediate grammar. Prerequisite: Biblical Languages 112.
- 212 **Biblical Greek IV (3)**Spring Odd
This course is a continuation of Biblical Languages 211. Students continue to work on reading Greek texts, developing their knowledge of grammar, and engaging in elementary exegesis. Prerequisite: Biblical Languages 211.
- 241- **Readings in Biblical Languages (1)** Fall, Spring
244 Students read Greek or Hebrew texts and work on building vocabulary and grammar skills to retain and develop skills learned in prior courses. Prerequisite: Biblical Languages 112 or 114.
- 281- **Service-Learning (1-3)**Fall, Spring, Summer
283 See page 120, Individual Studies
- 341- **Special Topics (3)**Occasional
348 Courses under this title are designed by the department from year to year to reflect student demand and need.
- 391- **Individual Studies (1-3)**Fall, Spring, Summer
393 See page 120, Individual Studies

Biology

The biology department offers several options for students with different career goals. Integrative threads in biblical perspective, biological structure, unity and diversity, historical context, environmental stewardship, and the practice of science are treated throughout. The Bachelor of Science provides excellent preparation for graduate or professional schools and is divided into a three-tier curriculum including foundational principles, distribution/exploration, and directed research. Five cognate support courses in chemistry, mathematics and/or statistics are included. The Bachelor of Arts major is smaller and has three cognate courses and no senior directed research requirement. It is intended for students who plan to enter the work force after graduation or who would like the option of a double major. General biology and biomedical science minors are also available for students in other majors who need significant biological coursework for their intended profession.

Bachelor of Science

General Major – Biology 122, 125, 180, 200, 215, 358, 380; six 3- or 4-credit courses* including at least two biology courses from the following: biology courses numbered above 215, Agriculture 251, 315, 316, Environmental Studies 270.

Students must complete the following chemistry cognates: Chemistry 111, 225, 261; two chemistry courses with lab numbered 200 or above (Statistics 201 can replace one of the chemistry courses); Statistics 131 or 132.

*Courses may be used from off-campus study sites such as the Au Sable Institute or the Latin American Studies Program, if appropriate and approved.

Bachelor of Arts

General Major – Biology 122, 125, 180, 200, 215; six 3- or 4-credit courses* including at least two biology courses from the following: biology courses numbered above 215, Agriculture 251, 315, 316, Environmental Studies 270.

UNDERGRADUATE ACADEMIC OFFERINGS: BIOLOGY

Students must complete the following chemistry cognates: Chemistry 111, 225; one chemistry course with lab numbered 200 or above.

*Courses may be used from off-campus study sites such as the Au Sable Institute or the Latin American Studies Program, if appropriate and approved.

General Minors--

Biology: Biology 122, 125, 200, 215; two semesters of college chemistry.

Biomedical Sciences: Two courses from Biology 203, 204, 325, 326; Biology 357; one college chemistry course; two courses from Biology 125, 210, 301, 302, 304, 335, second college chemistry course.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 86-99, Teacher Preparation Program.

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| 122 | General Zoology (4)Spring |
| | A study of the anatomy, physiology, ecology, taxonomy, and economic importance of the invertebrate and chordate animals. Three lectures and one laboratory period of three hours per week. Prerequisite: Biology 125. |
| 125 | Cell and Molecular Biology (4) Fall |
| | An introduction to molecular mechanisms in living organisms. Topics include structure and functions of cellular components, gene structure and expression, and recombinant DNA technology. Concepts of reductionism and evolutionary theory will be addressed. Three lectures and one laboratory period of three hours per week. |
| 180 | First Semester Seminar (1) Fall |
| | An introduction to scientific inquiry and the skills necessary to flourish in the sciences. Students will learn to think like scientists, read and evaluate scientific writing, consider how their faith informs their science, and learn about contemporary science/faith issues as they begin to participate in the community of learning and research on Dordt's campus. [Cross-listed: Chemistry 180] |
| 200 | Principles of Ecology and Field Biology (4) Fall |
| | An introduction to ecological studies including topics in ecosystem and community structure, nutrient cycling, energy flow, limiting factors, and population interrelationships. The laboratory will emphasize study of local flora and fauna via field work. Three lectures and one laboratory period of three hours per week, plus one or two Saturday field trips. Prerequisite: one year of college biology. |
| 203 | Human Biology I (4) Fall, Spring |
| | An overview of the structure and function of the human body, using an experimental approach. Addresses how worldview impacts the use of one's own body and guides ethical decision-making. Cadaver lab exercises will be included. Three lectures and one laboratory per week. For nursing, HHP, and other non-biology majors. [Cross-listed: CORE 212] |
| 204 | Human Biology II (4) Fall |
| | A study of human anatomy and physiology in the context of common diseases and disorders, integrating core knowledge of structure and function with clinical correlations. The complex connections of the human body are investigated with applied lab exercises and activities. Three lectures and one laboratory per week. For nursing majors. Prerequisites: Biology 203; Chemistry 102 or 110; or permission of instructor. |
| 210 | Nutrition (3) Fall, Spring |
| | This course will focus on the basic science of foods and their components including relationships to health and disease. The implications of personal decision making and behavior change, as well as social, economic, and cultural influences, will be discussed. Does not count toward the biology major. [Cross-listed: HHP 211] |
| 215 | General Botany (4) Fall |
| | An introductory study of the anatomy, physiology, taxonomy, and ecology of the major plant groups. Three lectures and one three-hour laboratory per week. Prerequisite: Biology 125. |
| 227 | Paleontology (3) .....Occasional |
| | An introduction to the major fossil plants and animals, and the environments (paleoecology) in which they are found. Three lectures, or two lectures and one two-hour laboratory per week. The course includes several Saturday field trips and one weekend field trip to the Pella area. Prerequisite: Biology 122; or permission of instructor. [Cross-listed: Earth Science 227] |
| 251 | Perspectives on Origins (3).....Fall Odd |
| | A study of the philosophical, theological, and scientific aspects of evolutionary theory and the creation-evolution debate. The course will |

use a seminar format in which students will be required to articulate and critically analyze the different positions on origins. Not open to freshmen. Prerequisites: one college science course; CORE 200. [Cross-listed: CORE 321]

- 281- **Service-Learning (1-3)**Fall, Spring, Summer
283 See page 120, Individual Studies
- 300 **Conservation Biology (3)**Occasional
An upper-level course emphasizing principles of applied population and community ecology, including the biology of endangered and threatened species, their conservation, and restoration. The course will be developed in the context of Christian environmental stewardship principles. The class will meet in seminar/discussion format. Occasional field trips. Prerequisite: Biology 200.
- 301 **Developmental Biology (3)**Fall Even
A study of the development of representative vertebrates and invertebrates including fruit fly, sea urchin, frog, fish, and chick. Two lectures and one laboratory period of three hours per week. Prerequisite: Biology 125; or permission of instructor.
- 302 **Microbiology (4)** Fall
A study of the form, structure, and classification of microorganisms, including an introduction to viruses. The course will emphasize bacteria, general laboratory techniques, culturing and control of microbial growth. A substantial portion of the course will deal with immunologic processes: antibodies and antigens, host-antigen reactions, T & B cell response mechanisms, and non-specific host defense mechanisms. Three lectures and one laboratory period per week. Prerequisite: second year student in the BSN program; or permission of instructor. Does not count toward the biology major.
- 304 **Histology (4)**Spring Even
A study of the microscopic anatomy of animal tissues and organs, emphasizing the relationship between structure and function. Three lectures and one laboratory period per week. Prerequisite: Biology 203 or 325; or permission of instructor.
- 310 **Advanced Microbiology (4)**Spring
An upper-level course in the study of microbes, their history, their cell biology, and inter-organism (symbiotic) processes. Topics will include and build on pro- and eu-karyotic distinctions, in-depth study of viruses and plasmids, anaerobic metabolism, biofilms, endosymbiosis, antibiosis, antibiotic resistance, disease mechanisms, how host immune responses develop and adapt. Laboratory work will include basic microscopic observation, culturing, and identification. Isolation and characterization of bacteria, viruses, and potential antibiosis will be featured as “unknown” work. Intended for biology majors and pre-medical students. Students cannot receive credit for both Biology 302 and 310. Three lectures and one three-hour laboratory per week. Prerequisite: Biology 125; or permission of instructor.
- 316 **Flora of North America (3)** Fall
Welcome to the flora of North America! This is a course in field biology and taxonomy of vascular plants. Our study will focus on the native vegetation of the tall-grass prairie landscape with its associated gallery forests and wetlands. We will be comparing local studies to plant complexes from other geographic locations. Two lectures and one laboratory period per week. This course includes extensive field work and potentially several weekend field trips. Prerequisite: Biology 215.
- 319 **Plant Physiology (3)**Spring Odd
A study of the basic functional aspects of plant growth, development, and reproduction. Lecture topics will include water relations, nutrient relations, translocation, photosynthesis, flowering, fruiting, seed germination, growth, development, and phytohormones. Two or three lectures and/or one three-hour laboratory period per week. Prerequisites: Biology 125; Agriculture 111 or Biology 215; Chemistry 110, 122 or Chemistry 111.
- 320 **Wildlife Ecology and Stewardship (3)**Spring Odd
Advanced examination of animal (especially terrestrial vertebrate) populations, communities, and habitats, particularly as such analysis is applied to the manipulation and exploitation of animal populations and communities to regulate their abundance and distribution and/or to restore them. Considerable exploration and critique of the development and practice of wildlife management, particularly as it compares to biblical principles for creation stewardship. Two lecture/discussion sessions and one three-hour lab per week. Additional activities include an overnight field trip and attending a wildlife conference. Prerequisite: one course from Agriculture 370, 371, Biology 200. [Cross-listed: Environmental Studies 320]
- 324 **Advanced Genetics (4)**Spring
A study of the relationship between genetic information and the organism. Topics include population genetics, selection, speciation, recombination, mutations, epigenetics, and systems biology. A variety of bioinformatics tools will be used for genomic analyses. Laboratories will involve crosses and analysis, molecular techniques, field trips, and computer applications. Includes discussions of God’s providence and evolutionary theory. Three lectures and one three-hour laboratory per week. Prerequisite: Biology 125.
- 325 **Human Anatomy (4)** Fall
A detailed study of the organ systems of the human body, with an emphasis on dissections, including cadaver dissections. Three lectures and one laboratory per week. Prerequisite: Biology 122 or 203; or permission of instructor.

- 326 **Human Physiology (4)**.....Spring
An advanced study of the functions of the human body and how it responds to stress and disease. Three lectures and one laboratory per week. Prerequisites: Biology 125; one college chemistry course; or permission of instructor. Biology 203 or 325 strongly recommended.
- 327 **Cadaver Dissection (1)**.....Summer
A one-week (40 hours) laboratory course to enhance students' knowledge of human anatomy, develop surgical skills, and gain a greater appreciation for the human body. A sufficient number of students is required for the course to be offered. Graded on a pass/fail basis. Prerequisite: Biology 325 (with rare exceptions); permission of instructor.
- 335 **Cell Biology (4)**.....Fall Even
A study of the morphology and physiology of the cell, its organelles, and its constituents. Three lectures and one three-hour laboratory per week. Prerequisites: Biology 125; Chemistry 111.
- 348 **Special Topics (3)**Occasional
These courses will vary from year to year and are offered as student demand and instructor availability permit. They are designed to open additional areas of biological inquiry.
- 355 **Research (1)**Fall, Spring
Laboratory or field research on an approved topic, supervised by the department staff. Strongly recommended for biology majors (sophomores, juniors, and seniors). This course can be seen as preliminary to Biology 380.
- 356 **Research (1)**Fall, Spring
A continuation of Biology 355.
- 357 **Medical Terminology (1)**.....Fall, Spring
The course is designed for students in pre-health professions and secretarial science—medical emphasis. Students will learn medical terminology and its meaning within the context of the healing professions. Programmed texts and computer software will be used with regular testing periods throughout the semester. Recommended that Biology 203 or 325 be completed before taking this course. Graded on a pass/no record basis.
- 358 **Introduction to Biological Research (1)**.....Fall, Spring
This is a mini-course designed to prepare students for directed senior research. The course will introduce the idea and practice of biological research. It will include the nature and scope of a research project, how to conduct literature searches, and how to design methods and protocols for problem solving. The class will meet weekly in seminar or tutorial format. Students will make weekly presentations of their progress, finalize their proposal for Biology 380, and (if appropriate) begin the work for the directed research project. Graded on a pass/no record basis. Prerequisites: Biology 122, 125, 200, 215. [Cross-listed: Chemistry 358; Environmental Studies 358]
- 380 **Directed Senior Research (3)**Fall, Spring
A senior-level research course that focuses on problem solving and critical thinking in the biological sciences. The project will be chosen and conducted interactively with a staff mentor(s). Research should begin in the context of earlier courses and library literature and extend to the lab and field on or off campus. Project results will be presented in a peer seminar. Prerequisite: Biology 358. [Cross-listed: Chemistry 380; Environmental Studies 380]
- 391- **Individual Studies (1-3)**Fall, Spring, Summer
393 See page 120, Individual Studies

Business Administration

General Major– Foundation (common to all emphases): Business Administration 100, 101, 201, 202, 205, 206, 241, 301, 305, 351; Economics 202, 203.

Students must select one of the following emphases:

Construction Management: Foundation; Chemistry 109 or 110; Communication 220 or 222; Construction Management 101, 102, 220, 225, 240, 270, 280, 370; Mathematics 152; Physics 201 or 215; Statistics 131 or 132; a minimum of three additional credits from business administration or construction management.

Finance: Foundation; Business Administration 242, 315, 325, 326, 327; Economics 303; Mathematics 152; Statistics 131.

General: Foundation; three business administration electives; one economics elective; one elective from business administration or economics.

Human Resource Management:	Foundation; Business Administration 207, 210, 333, 335; Communication 228, 260; Psychology 210; Statistics 131; English 305.
Information Systems:	Foundation; Computer Science 115, 120, 204, 319; one course from Computer Science 250, 290, 331; one business administration elective; one economics elective; Mathematics 152 or Statistics 202; Statistics 131.
International Business:	Foundation; Business Administration 330; Economics 321; Political Science 210; Theology 231 or 331; a minimum of six credits in an approved international off-campus experience.
Management:	Foundation; Business Administration 207, 215, 242, 270, 306, 307; Business Administration 335 or English 305; Statistics 131.
Marketing :	Foundation; Business Administration 306, 308, 336; Communication 260; Statistics 131; two courses from Business Administration 230, 334, 337, 338*. *Students interested in interpersonal promotional relationships should take Business Administration 334, 337. Students interested in the creative and technical aspects of promotion should take Business Administration 230, 338. Computer Science 101 and 103 also recommended.
Office Management:	Foundation; Business Administration 105, 112, 270, 321, 322; one business administration elective; Communication 228; English 305.
Public Administration:	Foundation; Political Science 202, 214, 245, 333; Communication 228; Business Administration 320; Economics 303 or 321; Economics 315.

General Minors--

Business:	Business Administration 100, 205, 206; Economics 202; Business Administration 201, 202 and one elective from business administration/economics or Business Administration 200 and two electives from business administration/economics.
Digital Marketing:	Business Administration 206, 338; Computer Science 101, 103; English 305; Business Administration 230 or Art 240; Communication 240 or 260; Computer Science 250 or Business Administration 242.
Human Resource Management:	Business Administration 205, 207, 210, 333, 335; Communication 228; Psychology 210.

Associate of Arts Degree Option Area of Concentration (Associate of Arts - Administrative Assistant)

See the "Academic Program" section for the Core Program for all A.A. programs (pages 22-23).

Business Administration 100, 105, 112, 321, 322; Business Administration 200 or 201; one elective from business administration; two electives in any combination of business administration, communication or English writing courses; CORE 110; CORE 180 (fulfills Core Program distribution elective). Note: Medical Emphasis option includes Biology 203 or 357.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 86-99, Teacher Preparation Program.

100	Computer Literacy for Business/Accounting Majors (3) Fall, Spring This course teaches important computer skills used in today's world of business. Areas of study include beginning and intermediate Excel and Word, advanced PowerPoint, an introduction to Access, and Windows and file management basics.
101	Introduction to Business (2) Fall This course will prepare you to understand your calling in the business industry. This course will help develop your understanding of God's plan for business and how you can become an effective Kingdom citizen in this area of work. This course will also help you gain a better understanding of the different roles people play within a business and the ways these roles work together for the effectiveness of the business. Finally, this course will provide students with advice on how to be successful within the business major.
105	Calculating Machines/Records Management (3).....Spring The development of job-level skill in the operation of the electronic calculator, emphasizing the application to the solution of typical problems in business mathematics. Includes an overview of records management principles and procedures. Introduction to database application software and paperless records management are also included.
112	Keyboarding and Document Formatting (3) Fall Development of accuracy and speed at the keyboard. Application of skill to common office documents including emails, letters, reports, newsletters and more. This course introduces students to word processing software. A focus is placed on formatting text within the document.

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- 200 **Introduction to Accounting (3)**Spring
An introduction to managerial accounting, presenting basic accounting concepts that are important to management decisions. Emphasis is placed on analyzing and interpreting accounting information that enables management accountants to work with managers from other areas, particularly marketing and operations, and to make decisions about costing, pricing, and production. The tools and information that are important are described within the decision framework rather than as isolated accounting procedures. Pre or corequisite: Business Administration 100.
- 201 **Principles of Accounting (3)** Fall
Introduces the concepts and terminology of accounting and financial reporting for modern business enterprises. The course is centered around analyzing and interpreting accounting information for use in making decisions about organizations. There is a special emphasis on analyzing the balance sheet, the statement of income and expense, the statement of cash flows, and the statement of stockholders' equity. Additional emphasis is placed on problem-solving, critical thinking, and communication skills that are necessary for forming conclusions about business activities and to communicate these conclusions to others.
- 202 **Principles of Accounting (3)**Spring
An introduction to managerial accounting, presenting basic accounting concepts that are important to management decisions. Emphasis is placed on analyzing and interpreting accounting information that enables management accountants to work with managers from other areas, particularly marketing and operations, and to make decisions about costing, pricing, and production. The tools and information that are important are described within the decision framework rather than as isolated accounting procedures.
- 205 **Principles of Management (3)** Fall, Spring
An introductory course in management theory and practice. Major topics covered include planning and strategic management, organizational design, leadership and motivation theory, and control mechanisms.
- 206 **Principles of Marketing (3)**Fall, Spring, Summer
A study of marketing institutions, product development, channels of distribution, price determination, promotion methods, government influences, and ethical problems facing marketing personnel. Includes a foundational study and discussion of business from a Christian perspective.
- 207 **Human Resource Management (3)** Fall
Introduces students to the role that Human Resource Management (HRM) plays in organizational settings. Course content is geared towards developing the foundational body of knowledge required of entry-level HRM practitioners and is organized around the four foundation areas of HRM expertise: staffing and recruitment, employee and organizational development, compensation and benefits administration, and labor relations. Prerequisite: Business Administration 205.
- 210 **Payroll Accounting and Employee Benefits (3)** Fall
In this course, students will explore payroll accounting and employee benefits as one of the most critical elements between accounting and human resources and one of the touch points between managerial and financial accounting. This class will explore payroll processing, legal and government regulations for payroll and benefits, record keeping rules, and employee benefit and compensation program design.
- 215 **Leadership Studies (3)**Spring
Involves the study of human behavior and how individuals influence that behavior. This course will reflect a diversity of perspectives on leadership and motivation. Students will examine different models, skills, and styles of leadership, review common traits of effective leaders, and evaluate, from a Christian perspective, the ethical and moral issues facing leaders.
- 226 **Personal Financial Management and Stewardship (3)** Fall, Spring
Prepares students for the many financial decisions that they will be making during their lives in light of a Biblical and reformed view of stewardship. [Cross-listed: CORE 260]
- 230 **Graphic Design (3)** Fall
This course is designed to give students the tools needed to effectively communicate and understand the area of graphic design. Students will be introduced to basic design theory that will help them create effective marketing documents. Adobe InDesign® and Photoshop® will be introduced to the student in a hands on, project-based learning environment.
- 241 **Professional Practices: Career Preparation and Etiquette (1)** Fall, Spring
Students will learn the purpose and process of preparing for a career and will learn formal etiquette useful in many areas of life. We will use hands-on learning to ascertain knowledge about finding and applying for jobs, workplace professionalism, professional interviewing, applying for graduate school, and other topics related to career preparation.
- 242 **Intermediate Excel Techniques (1)** Fall, Spring
This course will provide a development of skills needed to become proficient in the use of spreadsheets. Students will use PivotTables, charts, and organizational tools while incorporating many formulas to make their spreadsheets come to life. A main component of this

course will be hands-on learning with students becoming peer instructors for one another. This elective course is designed for students majoring in business who are in their sophomore, junior, or senior year. Prerequisite: Business Administration 100.

- 243 **Introduction to QuickBooks (1)**..... Fall, Spring
This elective course provides an introduction to and overview of QuickBooks, a computerized accounting software package popular in small- and mid-sized businesses. A main component of the course will be hands-on practice. By the time you complete this course you will have a good idea of all that QuickBooks offers, be familiar with the most common tasks, and know where to find information about more advanced features. Pre or corequisite: Business Administration 201. Credit for both Business Administration 200 and this module is not allowed.
- 244 **Lean Enterprise and Continuous Improvement (1)**..... Fall, Spring
The philosophy and related processes known as Lean is a major movement in a variety of organizations today, including for-profit, not-for-profit, and governmental. Continuous Improvement (CI) is a time-based methodology often employed to implement and sustain a Lean environment. This one-credit module will expose students to the theories and practical applications of Lean and CI, providing them a familiarity and working knowledge in the strong likelihood that they join a firm that practices Lean.
- 250 **Advanced Excel (2)**Spring Odd
This course focuses on the customization and programmability of Excel spreadsheets. The main topics covered will include writing macros, controlling spreadsheets, databases and other business applications using scripts and short programs. Prerequisite: Computer Science 102 or 115; or Corequisite: Business Administration 242. [Cross-listed: Computer Science 250]
- 270 **Project Management (3)** Fall
This course is an introduction to the field of project management. The primary objective is to acquaint students with a broad basic overview of project management and the role of a project manager throughout the five primary processes of managing projects. The course will also cover common agile methodologies and principles because of how they relate to project management. The agile project management process encourages frequent inspection and adaptation, teamwork, accountability, self-organization, best practices that allows for rapid delivery and high quality, and a business approach that aligns development with customer needs and company goals. Prerequisite: sophomore standing. [Cross-listed: Computer Science 270, Construction Management 270]
- 281- **Service-Learning (1-3)**.....Fall, Spring, Summer
283 See page 120, Individual Studies
- 301 **Business Law I (3)** Fall, Spring
This course provides an overview of the law as it relates to business, specifically focusing on regulation of businesses and business dealings. Specific topics covered include: government regulation, contracts, secured transactions, insurance, bankruptcy, and employment law. Primary emphasis is placed on contract formation and interpretation.
- 302 **Business Law II (3)**.....Spring
This course provides an overview of the law as it relates to business, specifically focusing on the way businesses manage liabilities. Specific topics covered include: torts, agency and vicarious liability, property, intellectual property, business entities, and estate and succession planning. Primary emphasis is placed on torts and corporate governance.
- 303 **Geographic Information Systems and Surveying (4)**Fall Even
An introduction to the acquisition, analysis, display, manipulation, and management of geographic information. Course topics will include geographical data input, storage, maintenance, analysis, and retrieval. Students will utilize common GIS software and associated hardware. An overview of survey methods used to gather and quantify features of physical geography will be included. The course will meet in two studio lab classes to provide an integral learn-by-doing experience applying GPS technology, survey methods, and GIS applications. Application of GIS to agriculture, business, environmental management, and other disciplines will be provided in this course. Prerequisite: sophomore standing or above. [Cross-listed: Agriculture 303, Construction Management 207, Environmental Studies 303]
- 304 **Entrepreneurship/Small Business Management (3)** Fall
A study of the importance of entrepreneurship in both the for-profit and not-for-profit sectors to the development of a society, emphasizing the different paths to business concepts, interactions with entrepreneurs, and the development of a business plan. Prerequisite: junior or senior standing; or permission of instructor.
- 305 **Corporate Finance (3)** Fall
An introduction to the theory, issues, and practice of business finance. Key components include valuation of financial assets, financial planning and control, working capital management, and capital budgeting. Prerequisite: Business Administration 100, 201; Math 115 for students with a score below 22 on the mathematics portion of the ACT.
- 306 **Marketing Management (3)**.....Spring
Prepares students to manage the interacting forces in the market to facilitate exchange processes between the producer and consumer. Strategic planning and implementation of all areas of marketing within acceptable ethical standards will be discussed. Through case studies

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and a simulation students will apply the concepts learned in Principles of Management and Principles of Marketing. Prerequisites: Business Administration 205, 206; junior or senior standing.

- 307 **Production and Operations Management (3)**.....Fall Even
Designed to acquaint students with the theory underlying production and operations management, to give them practice in solving the kinds of problems confronted by managers of production and service operations, and to inform them of the opportunities and challenges in the field. Prerequisites: Business Administration 205; or permission of instructor.
- 308 **Integrated Marketing Communications (3)**.....Fall
In this course, students will study the principles and practices of promoting a product or service including advertising, personal selling, direct marketing, public relations, trade promotions, and the internet, all from a Christian perspective. The importance of integrating all these areas of marketing communications will be emphasized. Prerequisites: Business Administration 206 or Communication 240; junior or senior standing.
- 310 **Intermediate Accounting I (3)**.....Fall
Analysis of financial accounting theory and current practice. Analysis of problems concerning valuation of assets, evaluation of liabilities and capital structure, communication, and reporting of financial information. Prerequisite: Business Administration 201.
- 311 **Intermediate Accounting II (3)**.....Spring
Continuation of Business Administration 310, includes special financial reports and financial analysis.
- 312 **Advanced Accounting (3)**.....Fall
A comprehensive study of accounting problems of partnerships, consolidations, branch operations, bankruptcies, estates, trusts, etc. Prerequisite: Business Administration 202.
- 313 **Cost Accounting (3)**.....Spring Even
A study of measurement and evaluation of production costs, including job order costing, process costing, standard costing, and quantitative methods of costing. Prerequisite: Business Administration 202.
- 314 **Auditing (3)**.....Spring
A working knowledge of principles and procedures of professional auditing and accounting with special emphasis on AICPA standards and professional ethics. Prerequisite: Business Administration 311.
- 315 **Federal Income Tax (3)**.....Fall
A study of federal income tax regulations and forms, based on the Internal Revenue Code, with primary emphasis on tax problems for the individual. Prerequisite: Business Administration 200 or 201; or permission of instructor.
- 316 **Advanced Federal Income Tax (3)**.....Spring
A study of federal income tax regulations and forms, based on the Internal Revenue Code, with primary emphasis on corporations, partnerships, S corporations, estates, and trusts. Business Administration 315 strongly recommended.
- 317 **Fraud Examination (3)**.....Spring Odd
In this course students will study fraud examination which is a methodology for resolving allegations of fraud from inception to disposition. The process involves gathering evidence, taking statements, writing reports, and assisting in the detection and prevention of fraud. Prerequisite: Business Administration 201.
- 320 **Not-For-Profit Accounting (3)**.....Fall Odd
Accounting methods and managerial analyses employed for governmental bodies and private and public not-for-profit institutions. Prerequisite: Business Administration 201.
- 321 **Office Management (3)**.....Fall
A study of procedures and duties essential to the efficient administration of an office by all employees. Emphasis on the role of teams in the workplace including relationships and communication. Introduction to the role of ergonomics at the workstation and in the office as well as the role of company culture in designing the workspace. Pre or corequisite: Business Administration 112.
- 322 **Advanced Office Administration (3)**.....Spring
A continuation of Business Administration 321. An emphasis on the productive relationship between the manager and the team members. A focus is placed on completing daily activities introduced in the course including meeting procedures, travel planning, virtual technology, etc. The role of human resources is also developed concerning the positions involved in an office setting. Prerequisite: Business Administration 321.
- 324 **Accounting Information Systems (3)**.....Spring Even
Students will develop a variety of technology and business analysis concepts and skills as users, managers, designers, and evaluators of

technology and technology-driven business processes. The student will develop an understanding of how organizational processes generate information important to management. This course will use daily assignments, papers, a project with presentation, and tests. Significant discussion will pertain to the design and implementation of an accounting information system according to a Reformed perspective.

- 325 **Advanced Financial Management (3)**.....Spring
The study of advanced topics in financial management, such as risk analysis, capital structure, dividend policy, mergers, acquisitions, foreign investment, etc. Case analysis will be used extensively. Prerequisites: Business Administration 202, 305.
- 326 **Investments Management (3)**.....Spring
The study of all types of investments with primary emphasis on stocks, bonds, and related securities. Includes a discussion of the function of securities markets and institutions and portfolio management. Prerequisite: Business Administration 305; or permission of instructor.
- 327 **Insurance and Risk Management (3)**..... Fall
Addresses the fundamental issues of risk management, property insurance, liability insurance, life and health insurance, the insurance market, and the operation of insurance companies. Topics to be discussed include the functions of insurance, government regulation, the nature and legal characteristics of insurance documents, marketing, loss adjustment, social insurance programs, employee benefit plans, re-insurance, and the international role of insurance underwriting. Open to juniors and seniors.
- 330 **International Business (3)**Spring Odd
A study of the special problems involved in doing business across national boundaries with an emphasis on the economic basis for trade and the impact of religious, cultural, and political environments on business practice. Includes an evaluation of the management, marketing, and financial practices of multinational corporations from a Christian perspective. (Credit will be granted for either this course or the International Marketing course taught in the Netherlands, but not both.) Prerequisites: Business Administration 206; Economics 202; junior or senior standing.
- 333 **Strategic Human Resource Management (3)**.....Spring
An advanced course in Human Resource Management (HRM). Specific emphasis is placed on the critical strategic role that HRM plays in the success of any organization and the application of HRM practices and theory through case studies and interactive in-class exercises. Prerequisites: Business Administration 205, 207.
- 334 **Consumer Behavior (3)**..... Fall
A study of how consumers select, purchase, use, and dispose of goods and services. Includes analyses of how markets and others influence these processes. Application of concepts and methods of the behavioral sciences to marketing management decision making. Considerable emphasis on biblical perspectives on wealth, materialism, and consumption.
- 335 **Organizational Behavior (3)**..... Fall
An advanced study of the theory and practice of organizational behavior. Topics include personality, motivation, group leadership, organization/work design, and group/team dynamics. Specific emphasis is placed on the diagnosis of organizational dysfunction and the design and implementation of appropriate Human Resource Management-driven interventions. Prerequisites: Psychology 210; junior or senior standing. Business Administration 205 and Psychology 376 recommended.
- 336 **Marketing Research (3)**..... Fall
A study of the various techniques used to assess the wants and needs of consumers, including focus groups and market surveys. Both qualitative and quantitative procedures will be studied with emphasis on questionnaire development and interpretation using SPSS. Business market and not-for-profit research will also be discussed. The value of secondary sources will be explored. A Christian response to the use of this analytical tool will be developed. Prerequisite: Statistics 131.
- 337 **Serving through Selling and Retailing (3)**..... Fall
Using lectures, class discussion, and small group activities, you will learn about the exciting fields of Personal Selling and Retailing. The basic areas of retail management will be covered: buying, merchandising, retail promotion, store location, store layout, credit management, and inventory control. Emphasis is on practical application of retail management principles. Also includes a study of the discipline of personal selling, including both sales strategies and sales management. Emphasis is given to both personal as well as business and industry sales applications. Topics include sales training, sales preparation, prospecting methods, types of presentations, handling buyer questions, closing methods, post-sales service, and sales management. Both areas will be approached from the perspective of serving others through these disciplines.
- 338 **Digital Marketing (3)**Spring
An exploration of the methods businesses use to approach customers in the digital age. This course will equip students with a variety of technical skills and knowledge related to the application of Marketing principles in an online environment. Includes a thorough preparation and testing for three certifications from the American Marketing Association and Google, as well as an exploration of the Sharing Economy - a disruptive movement in the economy today. Prerequisite: sophomore standing.

- 341- **Special Topics (3)**Occasional
 348 Courses on different topics of special interest, utilizing individual instructor strengths, interests, and competencies. Each course selected will involve a topic not usually treated in depth in regularly scheduled courses.
- 351 **Senior Business and Economics Ethics Seminar (3)** Fall, Spring
 An integration of departmental courses involving student research and analysis on current topics in business and economics, with primary emphasis on Christian perspectives for the businessperson and economist. Required for senior majors in business administration or economics. [Cross-listed: Economics 351]
- 360 **Portfolio Management (1)** Fall, Spring
 An introduction to the process of professional portfolio management via the Defender Capital Management Alumni Endowed Investment Fund (DCM). Students will gain insights into the philosophy, processes, and organization involved in managing an equity portfolio. They will also develop securities research skills, including uncovering sources of information, evaluating economic, industry, sector and firm data, and securities valuation and selection. Presentations will allow opportunities for communicating research findings and reports through formal and informal means. Students will also gain hands on experience with portfolio construction, asset allocation, and risk management, as well as experience with portfolio monitoring, performance evaluation and reporting. Students will be expected to serve concurrently as senior analysts and/or officers in Defender Capital Management. Prerequisite: Business Administration 305; or permission of instructor.
- 361 **Portfolio Management Practice (.5)** Fall, Spring
 Practical application of portfolio management techniques in the context of the Defender Capital Management portfolio. This practicum gives students valuable hands-on experience in securities research, valuation of risky assets, and asset allocation by managing the Defender Capital Management Alumni Endowed Investment Fund (DCM). Through readings, student-prepared research reports and presentations, students develop skills in evaluating economic, industry, sector and firm data, integrating such data into a formal securities analysis and selection process, and communicating their research results to others. Students will be expected to serve concurrently as senior analysts and/or officers in DCM. Depending on their position, they may also be asked to be involved in portfolio construction (including asset allocation), risk management, monitoring, performance evaluation, and reporting. Prerequisite: Business Administration 326; or permission of instructor.
- 371- **Business Administration Internship (3-9)**Fall, Spring, Summer
 373 Intended to provide business administration majors the opportunity to apply the knowledge, principles, and skills gained in the classroom in an actual business environment. Prerequisite: junior or senior status and 2.00 GPA; or permission of internship coordinator.
- 375- **Accounting Internship (3-9)**Fall, Spring, Summer
 377 Intended to provide accounting majors the opportunity to apply the knowledge, principles, and skills gained in the classroom in an actual accounting environment. Prerequisite: junior or senior status and 2.00 GPA; or permission of internship coordinator.
- 391- **Individual Studies (1-3)**Fall, Spring, Summer
 393 See page 120, Individual Studies

Chemistry

Bachelor of Science

General Major– Chemistry 111, 180, 212, 225, 231, 261, 271, 305, 358, 380; four courses from Chemistry 251 (or Au Sable 332), 321, 322, 331, 333, 361, 365, 393; three courses from Chemistry 252, 312, 323, 335, 362.

Students must complete the following cognates: Biology 125 or Environmental Studies 151 and 161; Mathematics 152, 153; Physics 201, 202, 203 or Physics 215, 216.

Bachelor of Arts

General Major– Chemistry 111, 180, 212, 225, 231, 261, 271, 305; a minimum of two credits from Chemistry 281-283, 284, 285 or Chemistry 358, 380; two courses from Chemistry 251 (Au Sable 332), 321, 322, 331, 333, 361, 365, 393; two courses from Chemistry 252, 312, 323, 335, 362.

Students must complete the following cognates: Biology 125 or Environmental Studies 151 and 161; Mathematics 152; one course from Mathematics 153, Statistics 131, 132; Physics 215, 216.

General Minor– Chemistry 111, 212, 225; two 3- or 4-credit courses from Chemistry 200 or above.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 86-99, Teacher Preparation Program.

- 102 **General, Organic, and Biochemistry (3)** Fall
An introduction to the fundamental concepts of general, organic, and biochemistry. Using relevant biological case studies, we will explore how chemistry helps us investigate, understand and explain the function and malfunction of living systems. Topics include atomic structures and chemical bonding, states of matter, chemical reactions, solutions, equilibria, acids, bases and buffers, basic organic chemical mechanisms, structure and function of biomolecules, enzyme catalysis, and central dogma of molecular biology. Three lectures per week.
- 109 **General Chemistry for Engineering (4)** Spring
This course will cover the foundations of chemistry with an emphasis on topics and problems relevant to engineering. Topics include atomic and molecular structure, chemical equilibria, chemical kinetics, chemical thermodynamics, and electrochemistry. An introduction to laboratory safety and chemical hygiene is included in the laboratory. Three lectures and one three-hour laboratory period per week. Prerequisites: one year of high school chemistry; Mathematics 152; Engineering 116 or Physics 201.
- 110 **General Chemistry (4)** Fall, Spring
A first course in the fundamental principles of chemistry for students in all science disciplines. Topics include measurement, the mole and reaction stoichiometry, atomic and molecular structure and bonding, intermolecular forces, gases, types of reactions, and energy in chemical reactions. An introduction to laboratory safety and chemical hygiene is included in the laboratory. Three hours of lecture and one three-hour laboratory period per week.
- 111 **Principles of Chemistry (4)** Fall, Spring
A study of the fundamental principles of chemistry and an introduction to foundational issues in science. Topics include atomic and molecular structure, chemical equilibria, chemical kinetics, chemical thermodynamics, and electrochemistry. An introduction to laboratory safety and chemical hygiene is included in the laboratory. This is the first course in chemistry for majors in the physical and life sciences. Three lectures and one three-hour laboratory period per week. Prerequisite: completion of online mini-course or Chemistry 110.
- 122 **Organic and Biological Chemistry (4)** Spring
Organic molecules and their functional groups and biomolecules and their function in living cells will be studied. Three lectures and one three-hour laboratory period per week. The laboratory will include experiments in organic and biological chemistry. Prerequisite: Chemistry 109 or 110 or 111; or permission of instructor.
- 180 **First Semester Seminar (1)** Fall
An introduction to scientific inquiry and the skills necessary to flourish in the sciences. Students will learn to think like scientists, read and evaluate scientific writing, consider how their faith informs their science, and learn about contemporary science/faith issues as they begin to participate in the community of learning and research on Dordt's campus. [Cross-listed: Biology 180]
- 212 **Chemical Analysis (4)** Spring
An in-depth study of the theory and practice of quantitative methods of chemical analysis. Includes discussion of proper laboratory techniques, theory of operation of common laboratory equipment, discussion of various analytical methods, sampling and sample preparation, and discussion of statistical methods for evaluating and interpreting data. Three lectures and one three-hour laboratory period per week. Prerequisite: Chemistry 109 or 111; or permission of instructor.
- 225 **Organic Chemistry: Structure and Mechanism (4)** Fall
In this foundational organic chemistry course, students will learn the foundational topics and problem-solving skills needed to understand the plethora of chemical reactions that involve compounds containing carbon. A working knowledge and application of topics such as nucleophiles, electrophiles, acids, bases, stereochemistry, mechanism, kinetics, substitution reactions, elimination reactions, carbonyl chemistry, and conformational analysis will be developed. Through a detailed understanding of the chemistry, an honest discussion of ethical implications, and a thoughtful interaction with the material we will develop an understanding of how God reveals himself through his creational structure. Prerequisite: Chemistry 109 or 111.
- 231 **Foundations of Physical Chemistry (4)** Fall Odd
This course gives a foundational treatment of the major areas of physical chemistry: chemical kinetics, thermodynamics with an emphasis on chemical and phase equilibria, and quantum chemistry with an emphasis on simple quantum systems, bonding, and spectroscopy. Three lectures and one three-hour laboratory period per week. Prerequisites: Chemistry 109 or 111; Mathematics 152. Physics 201, 202, 203 or Physics 215, 216 recommended.
- 251 **Environmental Chemistry (3)** Spring Odd
A study of the nature and transport of chemical species—both natural and human-introduced—in the natural environment (atmosphere, hydrosphere, geosphere, and biosphere). Three lectures per week. Prerequisite: Chemistry 109 or 111; or permission of instructor. Prior completion of Chemistry 122 or 225 recommended. [Cross-listed: Environmental Studies 251]
- 252 **Environmental Chemistry Laboratory (1)** Spring Odd
This lab will include methods of sampling and analysis of samples from natural and/or human influenced environments. Graded on an A-F scale. Corequisite: Chemistry 251. [Cross-listed: Environmental Studies 252]

UNDERGRADUATE ACADEMIC OFFERINGS: CHEMISTRY

- 261 **Foundations of Biochemistry (3)**Spring
An exploration of the creation of God as it manifests itself in the compounds and reactions found in the living cell. Students will learn about the structure and properties of the four major classes of biological molecules in the cell. Students will apply knowledge from General Chemistry and Organic Chemistry to explore the compounds found in the various cell organelles. Includes a study of the catalysis of all biological reactions by enzymes, the flow of molecules through membranes, and the importance of bio-signaling mechanisms. Three lectures per week. Prerequisite: Chemistry 225.
- 271 **Inorganic Chemistry (3)**Spring Even
A survey of the chemistry of the elements based on the physical principles underlying the periodic arrangement of the elements. Three lectures per week. Prerequisite: Chemistry 109 or 111.
- 281- **Service-Learning (1-3)**Fall, Spring, Summer
283 See page 120, Individual Studies
- 284 **Education Project in Chemistry (1-3)** Fall, Spring
Students will design and implement a project in chemical education. May be offered upon request to the department chair.
- 285 **Literature Review in Chemistry (1-3)** Fall, Spring
Students will conduct a literature review on a topic in modern chemistry. May be offered upon request to the department chair.
- 305 **Perspectives in Physical Science (3)**Fall Even
Historical, philosophical, and theological perspectives on the physical sciences are discussed and developed. The historical and contemporary roles of Christianity and other influential forces in science are considered. Prominent positions in the philosophy of science are examined. Aspects of the complex interactions between Christian faith and the physical sciences are discussed. Prerequisites: CORE 200; completion of the Core Program natural science requirement with a physical science course (Astronomy, Chemistry, Physics, or CORE 220-229). [Cross-listed: CORE 315, Physics 305]
- 312 **Instrumental Analysis (3)**Fall Odd
Optical, electrical, and chromatographic methods of quantitative analysis and theoretical study. The class meets for three lectures per week for the first two-thirds of the semester; laboratory experiments are performed during the last one-third of the semester. Prerequisite: Chemistry 109 or 111; or permission of instructor.
- 321 **Advanced Organic Chemistry: Synthesis and Mechanism (3)**Spring Even
In this advanced organic chemistry course, students will learn more advanced topics and problem-solving skills needed to understand the diversity of chemical reactions utilized in modern organic chemistry. Through the process of reviewing current chemical literature articles that report the total synthesis of natural products and investigate reaction mechanism, students will apply the foundational ideas learned in Chemistry 225, classify reactions based on analogy, articulate an understanding of topics such as stereoselectivity and regioselectivity, and explore how organic chemists advance the field. Through a detailed understanding of the chemistry, an honest discussion of implications, and a thoughtful interaction with the material will we develop an understanding of how we as scientists and Christians should respond to culture. Prerequisite: Chemistry 225.
- 322 **Advanced Organic Chemistry: BioOrganic (3)**Spring Odd
In this advanced organic chemistry course, students will learn the application of organic chemistry to the processes of life. Through the process of reviewing chemical literature articles that report metabolic pathways and the total synthesis of biological products, students will apply the foundational ideas learned in Chemistry 225, classify reactions based on analogy, articulate an understanding of topics such as stereoselectivity and regioselectivity, and consider how biological catalysts accommodate chemical reactions. Through an in-depth application of the chemistry, an honest discussion of implications, and a thoughtful interaction with the material we will develop an understanding of how God has created a world in which life is supported through organic chemistry. Prerequisite: Chemistry 225.
- 323 **Advanced Organic Chemistry Laboratory (1)**Spring
In this advanced laboratory course, students will propose, complete, and report on common laboratory techniques utilized in organic chemistry. Students will explore several common reactions including esterification, electrophilic aromatic substitution, and multi-step chemical synthesis. Students will also propose and complete an individual laboratory project. Graded on an A-F scale. Pre or corequisite: Chemistry 321 or 322.
- 331 **Thermodynamics and Statistical Mechanics (3)**Spring Even
The study of heat, the laws of thermodynamics, thermodynamic generating functions, Maxwell's relations, kinetic theory, partition functions, and classical and quantum statistics. Three lectures per week. Prerequisites: Chemistry 231; Mathematics 152, 153; Physics 201, 202, 203 or Physics 215, 216. [Cross-listed: Physics 331]
- 333 **Quantum Chemistry (3)**Fall Even
Quantum mechanics as applied to chemical systems. An introduction to quantum theory including a study of the postulates and simple systems. Application of quantum mechanics to atomic and molecular structure and bonding. Theoretical foundations of atomic and

molecular spectroscopy. An introduction to computational methods of quantum chemistry. An overview and critique of philosophical theories relating to the meaning of quantum mechanics. Three lectures per week. Prerequisites: Chemistry 231; Mathematics 152, 153; Physics 115, 116 or 201, 202, 203; or permission of instructor.

- 335 **Advanced Physical Chemistry Lab (1)**Fall Even
In this advanced laboratory course, students will propose, complete, and report on common laboratory techniques utilized in physical chemistry. Graded on an A-F scale. Pre or corequisite: Chemistry 331 or 333.
- 341- **Special Topics (3)**Occasional
348 This course will consist of topics not normally covered in other chemistry courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.
- 355 **Research Apprenticeship (1)** Fall, Spring
Laboratory or field research on an approved topic, supervised by the department faculty, working on a current research project in the department. Strongly recommended for chemistry majors (sophomores, juniors, and seniors). This course can be seen as preliminary to Chemistry 358 and/or Chemistry 380.
- 358 **Introduction to Chemical Research (1)** Fall, Spring
This is a mini-course designed to prepare students for directed senior research. The course will introduce the idea and practice of chemical research. It will include the nature and scope of a research project, how to conduct literature searches, and how to design methods and protocols for problem solving. The class will meet weekly in seminar or tutorial format. Students will make weekly presentations of their progress, finalize their proposal for Chemistry 380, and (if appropriate) begin the work for the directed research project. Graded on a pass/no record basis. Prerequisites: Chemistry 111, 225, 261. [Cross-listed: Biology 358, Environmental Studies 358]
- 361 **Advanced Biochemistry (3)**Fall Odd
A study of the way the cell uses the breakdown of molecules to extract energy and then uses this energy for sustaining the functions of the cell by producing new needed biomolecules. This sequence will begin with the study of the metabolism of the carbohydrates culminating in the electron-transfer processes leading to the production of ATP. The metabolism of other types of biomolecules such as lipids, proteins, and nucleic acids will also be studied. Finally, the processes of biosynthesis will be investigated beginning with photosynthesis of carbohydrates in plants and ending with biosynthesis of lipids and proteins. The last chapter will help the student to appreciate how all of these complex created biological processes are regulated by the use of hormonal signals which integrate and coordinate the metabolic activities of different tissues and optimize the allocation of fuels and precursors to each organ. Three lectures per week. Prerequisite: Chemistry 261.
- 362 **Advanced Biochemistry Laboratory (1)**Fall Even
The purpose of the laboratory is to provide practical hands-on experience for students so they can appreciate the reactions taking place in the cells God has created. The experiments will be organized to parallel the various topics in Chemistry 261. One three-hour laboratory per week. Graded on an A-F scale. Prerequisite: Chemistry 261.
- 365 **Solar System Chemistry (3)**Spring Odd
A detailed survey of the chemistry of the Sun, planets, satellites, asteroids, and comets. Topics include the origin of the elements and clues regarding the formation of planetary systems including exoplanetary systems, the comparative geochemistry of the terrestrial planets (Mercury, Venus, Earth, Mars), and the atmospheric chemistry of the gas giant planets (Jupiter, Saturn, Uranus, Neptune) based upon ground, orbital, and spacecraft observations, and implications for a Christian understanding of the origin and history of the Earth and the Solar System. Prerequisite: Chemistry 109 or 111; one course from Astronomy 121, Earth Science 201, 202, Chemistry 251; or permission of instructor. Chemistry 231 recommended.
- 380 **Directed Senior Research (3)** Fall, Spring
A senior-level research course that focuses on problem solving and critical thinking in the chemical sciences. The project will be chosen and conducted interactively with a staff mentor(s). Research should begin in the context of earlier courses and library literature and extend to the lab and field on or off campus. Project results will be presented in a peer seminar. Prerequisite: Chemistry 358. [Cross-listed: Biology 380, Environmental Studies 380]
- 391- **Individual Studies (1-3)**Fall, Spring, Summer
393 See page 120, Individual Studies

Communication

General Major–

Communication Studies: Communication 180, 220, 222, 228, 230, 232, 240, 241, 270, 301, 311 or 314, 322, 380, 392; three courses designed to fit the vocational choice of the student. Two of these courses must be communication courses and the communication department advisor must approve all three.

UNDERGRADUATE ACADEMIC OFFERINGS: COMMUNICATION

Digital Media Production:	Art 201 or 202, 240, 295; Communication 180, 240, 241, 250, 255, 320, 330, 333, 380, 381; two courses from Business Administration 308, English 307, Music 306, Theatre Arts 205, two credits of Communication 391. Courses from the Los Angeles Film Studies program could satisfy these two requirements.
Healthcare Communication:	Communication 180, 230, 232, 240, 241, 270, 380; Communication 222 or 228; Communication 261 or 305; one course from Communication 220, 260, 311, 314; one credit from Communication 041, 051, 061, 071, 371, 391; Biology 357; Business Administration 206; CORE 212; Health and Human Performance 209; Nursing 180, 207; Political Science 333; Statistics 131.
Journalism:	Communication 180, 240, 241, 242, 244, 245, 250, 260, 301, 323, 324, 382; one course from Communication 222, 320, English 302, 304, History 308; four credits from Communication 041. To complete this major, students will work with their advisor to select four additional courses to gain content knowledge for a beat concentration. Students will select a concentration that most closely matches their reporting interests. Recommended that journalism majors take Statistics 131 to fulfill their Core quantitative reasoning requirement.
Public Relations:	Communication 180, 228, 232, 240, 241, 250, 260, 261, 323, 360, 380; Art 240; Business Administration 206, 336; three credits from Communication 041, 051, 061, 071, 371, 391, 392, 393.

General Minors–

Communication Studies:	Communication 180, 222, 228, 240, 270, 301; Communication 220 or 322.
Digital Media Production:	Art 201 or 202, 240; Communication 240, 250, 320; two courses from Business Administration 308, Communication 330, 333, English 307, Music 306, Theatre Arts 205.
Journalism:	Communication 240, 241, 242; Communication 301 or 302; two courses from Communication 244, 245, 323, 324; two credits from Communication 041.
Public Relations:	Communication 228, 260, 261, 360; Business Administration 206, 336.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 86-99, Teacher Preparation Program.

041	Diamond Workshops (1) Fall, Spring This workshop provides hands-on practical experience working as a team on the campus newspaper and website, the Diamond. Joining the staff of the student-led publication offers opportunities to apply multimedia storytelling and design skills learned in class, hone deadline-reporting expertise, and develop management and leadership abilities. This workshop is required of all journalism majors and may be completed for credit up to four times.
051	Forensics (1) Fall, Spring Forensics includes individual events and debate for the continued development of public speaking skills. Active participation involves weekly practice and coaching, as well as formal evaluation in a collegial, competitive environment at regional tournaments. Graded on a pass/no record basis.
061	KDCR (1-3) Fall, Spring KDCR strives to obediently communicate God's unfolding creation, equipping and encouraging listeners to live according to His Word. Students apply for 1-3 hours of academic credit for work at KDCR. Registration for credit is required in the semester in which you are on the KDCR staff. Student work may include broadcasting, reporting, writing, and editing, or promotional work, regular meetings or other work as determined by the student and KDCR management.
071	Dordt Media Network (1-3) Fall, Spring Dordt Media Network strives to obediently communicate God's unfolding creation, equipping and encouraging viewers to live according to His Word. Students apply for 1-3 hours of academic credit for work with the Dordt Media Network in two areas: video production and live stream/remote broadcast production. Registration for credit is required in the semester in which you are on the Dordt Media Network team. Student work will include producing promotional videos for the university and sports highlight videos of Defender athletic events. In addition students can work on the live stream/remote broadcast team as camera operators, graphic, replay and audio operators.
105	Workplace Communication (3) Fall During this semester we will be exploring the types of formal and informal communication encountered in a workplace setting. Where we work is a fundamental part of who we are so it is vital we learn about and practice the various kinds of communication that take place in an organization. There is a lot to cover during our time together, but some of the issues involve discovering the communication process, improving listening skills, developing public speaking and presentation skills, improving interpersonal communication, and examining cross-cultural influences.

- 180 **First Semester Seminar (1)**..... Fall
Designed to introduce the beginning communication student to some basic principles and thought in the field of communication. Offered in a seminar style, each week we will meet to cover key concepts of communication, such as the communication model, areas of communication, and preparing for a career in communication. This introductory course is designed for new communication students, but anyone wanting an overall understanding of communication and its principles will benefit as well.
- 220 **Small Group Communication (3)** Spring Even
A study of the theory and practice of group problem-solving in cooperative face-to-face discussion; the development of awareness and understanding of group dynamics, and the presentation of panel, symposium, and dialogue.
- 222 **Interpersonal Communication (3)** Fall, Spring
The study of concepts, problems, and responsibilities in communication between two or more persons, focusing on conversation with consideration of many variables and contexts. [Cross-listed: CORE 254]
- 228 **Organizational Communication (3)**..... Spring
The analysis of formal and informal communication in such organizations as corporations and institutions. Included will be considerations of communication problems related to grapevine, rumor, channels, perception, power, status, roles, structures, etc.
- 230 **Listening (3)**..... Spring Odd
In this course, we have the opportunity to explore the important topic of listening. In particular we will study concepts, problems, and responsibilities in the communication field of listening. We will focus on the Christian perspective regarding the ethical responsibility for listening and improving listening skills. Dietrich Bonhoeffer states, "The first service one owes to others in the community involves listening to them. Just as our love for God begins with listening to God's Word, the beginning of love for other Christians is learning to listen to them."
- 232 **Emerging Media (3)**..... Spring Even
In this course, we explore technology's role and influence in media, communication, and faith. Through the study of communication theories, marketing techniques, entertainment vocabulary, technology applications, and Scripture, we will consider social change at various levels (from the individual to the world). Students will use digital communications tools creatively to apply practical concepts to organizational settings, professional roles, and special areas of interest.
- 240 **Introduction to Mass Communication (3)**..... Fall
An introduction to the concept of mass communication and its application to electronic and written media. The course will survey the historical development of the technology, effects, and theory of the media through major issues.
- 241 **Introduction to Journalism (3)** Fall
An overview of how the insights and skills gained by journalists as they examine and understand the world can be used to sustain and build community. Students examine the reporter's role and mandate in society, the current state of the news media, and how Christians can use journalism to serve the public good by helping a civilization confront its challenges. The course emphasizes doing journalism with practice in several types of creative but factual storytelling for print, audio, and video media. Students also explore the historical and cultural foundations of journalism and investigate journalism theories. [Cross-listed: English 241]
- 242 **Advanced Reporting and Writing for the Public Media (3)**..... Spring
This course is designed to help students reach the next level when it comes to media storytelling. Students will practice the mechanics and methods professionals use to tell true stories that inform and engage the public. Developing the mind of a journalist, students will apply contemporary reporting strategies and writing fundamentals by covering real events on campus and in the community. [Cross-listed: English 242]
- 244 **Beat Reporting (3)**..... Fall Even
Using the community as the laboratory, this course enables students to practice responsibly serving the public good by being a watchdog who holds the powerful accountable and tells the stories of the weak. Students in this course learn the foundations of beat reporting, going deeper into the many subjects a journalist covers. Specialized areas to explore may include politics, education, business, agriculture, art, science, community development, crime, healthcare, sports, and religion.
- 245 **Digital Storytelling (3)** Fall Odd
In this course students increase their digital IQ, by studying and practicing the ways technology continues to change journalism. By learning how to be a mobile journalist in the age of mobile audiences, students become comfortable with reporting, writing, and publishing for tomorrow's digital media. The latest technological tools and software are used to craft compelling stories through words, sounds, and pictures.

UNDERGRADUATE ACADEMIC OFFERINGS: COMMUNICATION

- 250 **Introduction to Film/Video Production (3)**Spring
In this introductory course, students will gain working knowledge of sophisticated cameras and equipment, a beginning knowledge of editing on the Avid platform, and in-depth discussion of what it means to be a Christian in the communication and entertainment industry today. Students will work in teams to produce films during the semester.
- 255 **Film Criticism (3)**Spring
Movies are one of the most powerful forms of communication of the modern era, but how many of us actually know how to “read” them? Directors use camera angles, color, music, sound, blocking, mise-en-scene, and various other techniques to tell us a story without words. Knowing the language of film will make them more enjoyable and help you understand them better. Film screenings will include popular films, classic films, and films that both critics and audiences praise. Students will be introduced to theories of film criticism.
- 260 **Public Relations (3)** Fall
As an introduction to public relations, this course will set the background for additional courses in communication and business administration. After a study of the history of public relations, students will learn what is expected of public relations workers, study the various publics, become familiar with current problems and issues in public relations, analyze several cases, and develop a Christian perspective for the continued study of public relations.
- 261 **Public Relations Writing (3)**Spring Odd
This course is, above all, a writing course. Focused on public relations writing that serves overall organizational goals, the course readings and assignments allow students opportunities to further develop their writing, research, and critical thinking skills and creativity in one of the most culture-shaping industries.
- 270 **Cross-Cultural Communication (3)** Fall, Spring
This course explores a variety of cross-cultural and intercultural communication experiences. Students will explore the concept of culture and examine the relationship of culture and communication to build a framework for studying cross-cultural communication patterns from a variety of representative cultures (including North American culture). Special emphasis will be given to the influence of worldview, ethnic identity, and socialization on the process of communication. Overall, this course is designed to help you appreciate and understand different forms of communication and begin to develop a Christian perspective for the differences and relationships between cultures. [Cross-listed: CORE 270]
- 281- **Service-Learning (1-3)**Fall, Spring, Summer
283 See page 120, Individual Studies
- 301 **Advanced Expository Writing I (3)** Fall
This course is designed to introduce students to types of non-fiction writing frequently sought by magazines and journals. Major assignments include the interview, the narrative essay, and the review. Especially featured is the personal narrative. In addition to writing, students will read and react to various types of non-fiction writing—both essays and longer works. Significant class time is spent in workshop format with students reading and discussing their own work. Satisfies Core Program writing-intensive requirement. English 220 recommended. [Cross-listed: English 301]
- 302 **Advanced Expository Writing II (3)**Occasional
The primary goal of this course is to help students write with clarity, grace, and power. To achieve this goal, they will write expository essays, hone research skills, work style exercises, and critique one another's papers. Note: Advanced Expository Writing I emphasizes narrative prose, while Advanced Expository Writing II emphasizes argumentative and explanatory prose. Satisfies Core Program writing-intensive requirement. [Cross-listed: English 302]
- 305 **Business and Technical Writing (3)**Spring
Students will study the process, application, and characteristics of business and technical writing, and the way in which writing style, strategies, content, and clarity will relate practically to one's profession. Concentrates on developing competence in a variety of writing tasks commonly performed in business, law, industry, social work, engineering, agriculture, and medicine. Satisfies Core Program writing-intensive requirement. [Cross-listed: English 305]
- 311 **Advanced Public Address (3)**Spring Odd
An emphasis upon proper speech construction and delivery with application of communication concepts. Includes analysis of some public addresses. Prerequisite: CORE 110 or equivalent.
- 314 **Argumentation and Persuasion (3)**Spring Even
After a study of the history of argumentation and persuasion and the relationship of argumentation and persuasion, this course will focus on various theories of attitude change, the structure of argument, and the development of a Christian perspective. Applications of argument and persuasion to be considered are: propaganda, advertising, political campaigns, and political debate. The student will be expected to apply the course studies to his/her specific vocational decisions.

- 320 **Advanced Film/Video Production (3)**..... Fall
Building on the preproduction, production, and postproduction skills gained in Communication 250, students will bring their film/video production skills to a deeper level through in-depth analysis of other filmmakers' work and through hands-on work with green screen techniques and more. A variety of videos will be produced during the semester. Prerequisite: Communication 250.
- 322 **Family Communication (3)**.....Spring Odd
The focus of this course is to analyze and understand communication in long-term interpersonal relationships in the family. Problems specific to family communication will receive attention. The course aims at improving communication by stressing application of communication principles to family interaction. Prerequisite: Communication 222; or permission of instructor.
- 323 **Communication Law and Ethics (3)**Spring Odd
The course examines the legal roots behind the notion of a public media. Students will explore the laws protecting communication in the public square. Students will study the ethics highlighting a communication professional's responsibilities in the face of these legal freedoms and protections. Paying particular attention to principles from a Christian perspective and using case studies, mock trials, and role playing, students will look at both what a communicator can do and what a communicator should do.
- 324 **Issues in Journalism History and Culture (3)**.....Spring Even
An in-depth exploration of the roots of journalism and an examination of how the media both chronicles and shapes culture. Students follow journalism's own story from the printing press to podcasts, using research and storytelling skills to bring history to life. Focus topics vary each semester but in general will include a look at the people and technology that drove journalism's growth. Readings may come from such well-known journalists as Ben Franklin, Mark Twain, Nellie Bly, and Ida Tarbell while periods covered could include the American Revolution, The Civil War, Vietnam, Watergate, and the War on Terrorism.
- 330 **Advanced Video Editing (3)**Spring Odd
Students will do an in-depth study of the film/video editing techniques of great editors through history, study the impact that editing decisions have on a final product, and bring their own editing abilities to a new level through advanced training with Media Composer and Premiere Pro. Prerequisite: Communication 250.
- 333 **Documentary Film Making (3)**.....Spring Even
A study of the history of the genre; screen documentary films and draw upon a wealth of critical writings produced in the past to help us decipher the textual strategies that create documentary films' "reality effect." Students will also explore the creative, technical, and practical aspects of creating a documentary film. Teams will produce documentary films for their final projects. Prerequisite: Communication 250.
- 341- **Special Topics (3)**Occasional
348 Courses will consist of topics not normally covered in other communication courses. Specially designed to focus on more specific topics utilizing instructor strengths and consideration of student needs.
- 350 **Short Film Production (3)**..... Fall
This course gives a select number of students an immersive opportunity to create a short film by working in assigned roles on a film crew. The team will collaborate to create a short film that is content worth consuming. Understanding the unique roles of filmmaking and the critical need for cooperation and collaboration will help students become better communicators in this culture-shaping arena.
- 360 **Campaigns and Cases (3)**Spring Even
An advanced course that focuses on public relations as a management function in organizations. A key component of the course is planning and implementing a public relations campaign for a local organization. Students also will examine specific public relations contexts and analyze case studies that exemplify how real organizations successfully apply communication to take advantage of public relations opportunities and to solve public relations problems.
- 371 **Communication Internship (1-6)**Fall, Spring, Summer
A supervised work experience in the areas of communication, public relations, journalism, digital media, or radio broadcasting with KDCR or with the Digital Media Network designed to provide the student with the opportunity to apply principles and skills gained through coursework. Open to all communication students.
- 380 **Senior Seminar (3)** Fall
The capstone for communication and digital media production majors. Students will research, discuss, and struggle with major issues in communication such as freedom of speech, media impact, modern technology, and the information superhighway. Students will be pressed to expand and refine their Christian perspectives regarding communication with the study of the role and responsibility of communication in society. Students will examine current communication theories, research, and research design. Prerequisite: senior standing and completion of all foundation courses in the major.
- 381 **Media Production Practicum (3)**..... Fall, Spring
Building on skills learned in Communication 250 and 320, junior and senior communication majors work independently to create media content for a client or on a project the student cares about deeply. Students gain valuable experience in meeting production deadlines, deal-

ing with client expectations, and behaving in a professional manner while producing media content. Students will regularly reflect on issues of ethics, excellence, and Christian perspective in one's work through readings, written reports, and discussion. Students will give a public screening of their project at the end of the semester. Prerequisites: Communication 250, 320; junior or senior standing.

- 382 **Journalism Capstone Seminar (3)**Spring
Serving as a culmination of time in the program and taking reporting to the highest levels, the seminar gives journalism majors a semester to produce a series of stories on a thematic topic. Students will work across multimedia platforms to develop their pieces, combining photography, video, graphics, sound, websites, and the written word to present engaging multimedia packages. Students will then demonstrate proficiency with social media strategies to disseminate their stories to a diverse audience. This final product can be used as a cornerstone for employment portfolios. Prerequisites: Communication 241, 242, 244, 245; junior or senior standing.
- 391- **Individual Studies (1-3)**Fall, Spring, Summer
393 See page 120, Individual Studies. Communication Studies students will be expected to take a two-credit communication individual study to create an interest-centered project that applies the communication principles they have been studying.

Community Development

The goal of community development work is to see communities (international and domestic, urban and rural) flourish in new ways. Community development professionals are motivated to help communities identify and solve their own problems. They have a broad understanding of the development process, as well as in depth knowledge in specific areas (see list of concentrations below). They may work in many settings, including government agencies (cities, states, the United Nations), non-profit development organizations (World Renew, Mennonite Central Committee), or for-profit companies interested in strengthening the communities they interact with.

General Major- Foundation (common to all concentrations): Community Development 101, 151, 161, 201, 301, 320, 330, 391; Community Development 373 or completion of a semester long cross-cultural experience approved in advance by the community development program leader.

Students must select two of the following concentrations:

Belief Systems and Culture:	Psychology 201; Psychology 210 or 384; Theology 231, 331, 332, 351, 352.
Business and Economics:	Business Administration 205, 206; Economics 202, 203, 334; Sociology 215; one course from Business Administration 304, 320, 330, Economics 321, Environmental Studies 152.
Communication and Digital Media:	Communication 222, 270; one course from Communication 220, 228, 240, English 305; eleven additional credits of communication coursework approved in advance by the community development program leader.
Community Education:	Education 101, 165, 203, 300; Communication 220 or 270; Education 355 or Linguistics 201; Sociology 215 or 216.
Facilities and Infrastructure:	Construction Management 101, 102, 207, 270; nine additional credits selected from construction management and engineering coursework and Environmental Studies 152 approved in advance by the community development program leader.
Food Systems:	Agriculture 101, 111, 221, 251, 370 or 371; three credits of agriculture electives numbered 200 or higher. Relevant courses from Au Sable Institute may be used if approved in advance by the community development program leader.
Natural Resources and the Environment:	Biology 200; Chemistry 110; Economics 334; Environmental Studies 251, 252; one course from Biology 316, Environmental Studies 270, 320; one course from Environmental Studies 152, 201, 202, 303, Geography 151.
Public and Environmental Health:	Chemistry 111; Sociology 201; Biology 200 or Environmental Studies 152; Biology 302 or Environmental Studies 251, 252; two courses from HHP 202, 209, 211. EMT training recommended.
Politics and Social Policy:	Political Science 201, 214, 245; Political Science 210 or 370; Social Work 313; Political Science 333 or Social Work 315; Sociology 215 or 305.
General Minor-	Community Development 101, 151, 161, 201, 301, 320, 330, 391; one of the above areas of concentration.

- 101 **Community Development Seminar I (1)**Spring
An introduction to the community development discipline with an emphasis on current events and a holistic understanding of the disci-

pline. The class will meet in one three hour laboratory block and integrate guest speakers, discussion and analysis, field trips, and interaction (direct or electronic) with community development professionals. Graded on a pass/no record basis.

- 151 **Communities and the Environment (3)** Fall
An introduction to contemporary environmental studies and creation care, with emphasis on class discussion of relationships between human population and resource use in light of biblical teaching about environmental stewardship. Particular attention is given to the biotic and ecological dimensions of creation stewardship and planetary distress. Designed to be taken by community development majors concurrently with Community Development 161. [Cross-listed: CORE 211, Earth Science 151, Environmental Studies 151]
- 161 **Field and Laboratory Investigations in Environmental Studies (1)** Fall
A field and laboratory exploration of fundamental issues, concepts, and techniques of contemporary environmental studies with a biological and ecological focus. Includes visits to sites of natural history and stewardship interest both locally and regionally. Also includes an introduction to important technological tools in environmental studies and analysis of physical and biotic parameters of the environment. Required for students majoring or minoring in Environmental Studies or Community Development. Corequisite: Community Development 151. [Cross-listed: Environmental Studies 161]
- 201 **Community Development Theory and Methods (3)**Spring Odd
An examination and critique of classical community development theory and methods from the inception of the discipline to the present time. Particular attention will be given to exploring the similarities and differences between secular and Christian approaches to the field and to examining the successes and failures of community development efforts. Two seventy-five minute lecture/discussion periods per week. Pre or corequisites: Community Development 101, 151 and 161.
- 281- **Service-Learning (1-3)**Fall, Spring, Summer
283 See page 120, Individual Studies
- 301 **Community Development Seminar II (1)**Spring Even
An examination of emerging trends and practices in community development. Particular emphasis will be put on how the field is developing and how Christians can contribute to it now and in the future. The class will meet in one three hour laboratory block and integrate guest speakers, recent articles and videos, field trips, and interaction (direct or electronic) with community development professionals. Prerequisite: Community Development 201.
- 320 **Place, Grace, and Humans in Community (3)**.....Fall Odd
A study of the philosophical foundations of social relationships. Possible topics explored include the relationship between groups of people and their physical environment, the possibility of understanding people from different cultures than our own, and whether we can hold other communities to the standards of our own communities. Prerequisite: CORE 200. [Cross-listed: Philosophy 320]
- 330 **Community Development and the Kingdom of God (3)**.....Spring Even
An exploration of the opportunities community development professionals have to live as kingdom citizens. This course will build on the framework established in Community Development 201, extending the theoretical and practical concepts and examining how they relate to our calling as Christians to work toward restoration and shalom in urban, rural, domestic, and international settings. Prerequisite: Community Development 201.
- 373 **Community Development Internship (3)** Fall, Spring
Provides community development majors and minors with an opportunity to learn from professionals in the community development field, to apply the insights, skills, and principles they have learned in their coursework, and to serve a community in a meaningful way. Prerequisites: junior or senior standing; permission of internship coordinator.
- 391 **Professional Conference Attendance (1)** Fall, Spring
Participation in a professional community development conference. Examples include the ECHO conference and the International Development Conference at Calvin University. Pre-conference and post-conference activities and assignments will be utilized to help participants prepare for, and process, the experience. Prerequisites: sophomore standing; permission of instructor.

Computer Science

General Major- Foundation (common to all concentrations): Computer Science 109, 115, 116, 120, 204, 205, 215, 315, 371, 390; Mathematics 152, 212; one course from Computer Science 283, 393, or an approved undergraduate research experience; one course from Communication 220, 222, English 305.

Students will select, in consultation with an ad hoc faculty committee, a set of at least 18 additional credits, from any department. These courses must constitute a cohesive preparation for the student's vocation and must be recommended by their ad hoc committee and approved by the department. Examples of concentrations that are possible include: Systems Administration, Business Programming, Data Science, Device Driver Programming, Graphics Animation, Computational Science, Digital Humanities, Agricultural GIS Programming, or preparation for the many

UNDERGRADUATE ACADEMIC OFFERINGS: COMPUTER SCIENCE

other fields of service which require both skills in computing and domain knowledge in some other area. Ordinarily, this set of courses will be selected as part of completing Computer Science 109 during the student's sophomore year. Recommended courses that should be included in many student's concentration include: Computer Science 270, 319, 331; Statistics 132.

Computer Science/Mathematics Major– Computer Science 115, 116, 120, 204, 205, 215, 315, 340; one course from Computer Science 290, 319, 331; Mathematics 152, 153, 203, 207, 209, 212, 304; one course from Mathematics 201, 204, Mathematics 215 and 216; Computer Science 390 or Mathematics 390.

General Minors–

Computer Science: Computer Science 115, 204, 205; Statistics 131 or 132; six credits from Computer Science 120 or above; three credits from Mathematics 148 or above.

Web Development: Computer Science 115, 120, 215, 319, 331; Art 250; Business Administration 338; one course from Mathematics 152, Statistics 131, 132.

Associate of Arts Degree Option Area of Concentration (Associate of Arts in Computer Networking).
See the “Academic Program” section for the Core Program for all A.A. programs (pages 22-23).

Computer Science 115, 116, 120, 204, 205, 215, 245, 371; two courses from Computer Science 250, 315, 319, 331; CORE 266 or Economics 202; English 305; Mathematics 149 or 152. Recommended electives: Business Administration 205, Communication 220, 222, Computer Science 319, Psychology 201, Statistics 131.

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| 101 | Digital Literacy (1)Occasional
An introduction into techniques and tools used to find, evaluate, utilize, share, and create content using information technologies and the internet. Topics for discussion include: perspectives on technology, the capabilities and limitations of computing, and issues relating faith, computer technology, and the impact on society. |
| 102 | Computational Literacy (1)Occasional
An introduction into techniques and tools used to develop algorithms, apply problem solving strategies, and acquire and analyze data. |
| 103 | Web Page Development (1)Occasional
An introduction into programming web pages. The course will focus on the implementation of HTML and CSS. Other topics will include the use of web content publishing platforms. Prerequisite: Computer Science 101 or 102. |
| 104 | Computational Science (1)Occasional
An introduction into techniques and tools used to apply computing capabilities to understand and solve complex problems. Topics for discussion may include: data types (representation, abstraction, and limitation), scientific data acquisition, solving equations and algorithms, or modeling. Prerequisite: Computer Science 102. |
| 109 | Callings and Careers in Computer-Related Fields (1) Fall
A survey of the various careers and fields of service that are possible in the field of computing. Topics include the breadth of opportunities available, insight into how to prepare, and guidance on selecting a unique set of concentration courses for the computer science major. |
| 115 | Programming I (3) Fall
An introduction to computer programming. Basic notions of abstraction, elementary composition principles, the fundamental data structures, and object-oriented programming technique are introduced. Topics include variables, control structures, arrays, and input/output. [Cross-listed: Engineering 170] |
| 116 | Selected Topics in Programming (1) Fall
An extension to the topics included in Computer Science 115 that will be beneficial to further study in computer science. Topics include a survey of other programming languages, an introduction to GUI and event-driven programming, and an introduction to the syntax of the C language. Corequisite: Computer Science 115. |
| 120 | Information Systems Design (4) Fall
An introduction to the nature of information systems, the conceptual foundations and use of such systems. Topics include information systems project management, requirements analysis and use cases, structural and behavioral modeling, prototyping, use of the Unified Modeling Language, and an introduction to SQL database access. Corequisite: any college level computer science course. |

- 204 **Introduction to Data Communications (4)**..... Fall
A study of the concepts, issues, and technology involved in the transmission of data. Topics include network configurations, communications protocols, data coding schemes, and transmission hardware. Prerequisite: completion of Core Program mathematics requirement. Pre or corequisite: Computer Science 115.
- 205 **Computer Systems (4)**Spring
An introduction to the organization and inner workings of a modern digital computer and its components. Topics include introductory digital logic and circuits, CPU components, memory systems, input/output, storage systems, and introductory operating systems concepts. Students gain experience in working on computers in the laboratory component of this course. Three lectures and one laboratory period of two hours per week. Strong algebra skills required.
- 215 **Programming II (4)**Spring
A continuation of Computer Science 115. The course includes advanced programming techniques, in-depth examination of object-oriented principles, good programming style including documentation, basic data structures including array lists and linked lists, and basic algorithm design, with attention to the sorting problem. Prerequisite: Computer Science 115; or permission of instructor.
- 245 **Network Systems Administration (3)**.....Spring Odd
An introduction to the issues involved in installing and maintaining a network operating system and other network servers. Students will gain hands-on experience with modern network operating systems and servers for common network services. Topics include managing network applications such as file serving, email, web serving, and security implementation. Strong algebra skills required.
- 250 **Advanced Excel (2)**Spring Odd
This course focuses on the customization and programmability of Excel spreadsheets. The main topics covered will include writing macros, controlling spreadsheets, databases and other business applications using scripts and short programs. Prerequisite: Computer Science 102 or 115; or Corequisite: Business Administration 242. [Cross-listed: Business Administration 250]
- 270 **Project Management (3)** Fall
This course is an introduction to the field of project management. The primary objective is to acquaint students with a broad basic overview of project management and the role of a project manager throughout the five primary processes of managing projects. The course will also cover common agile methodologies and principles because of how they relate to project management. The agile project management process encourages frequent inspection and adaptation, teamwork, accountability, self-organization, best practices that allows for rapid delivery and high quality, and a business approach that aligns development with customer needs and company goals. Prerequisite: sophomore standing. [Cross-listed: Business Administration 270, Construction Management 270]
- 281- **Service-Learning (1-3)**Fall, Spring, Summer
283 See page 120, Individual Studies
- 290 **Introduction to Data Science (4)**Spring Odd
Introduction to the field of data science and the workflow of a data scientist. Types of data (tabular, textual, sparse, structured, temporal, geospatial), basic data management and manipulation, simple summaries, and visualization. This course also serves as preparation for Actuarial Exam PA. Additionally this course, along with Statistics 220 and Statistics 353, serves as preparation for Actuarial Exam MAS II. Prerequisites: Computer Science 115; Statistics 201 or 202. [Cross-listed: Statistics 290]
- 315 **Data Structures (4)** Fall
A study of the various types of information forms handled by a computer, including the format of data and the design and analysis of algorithms to manipulate data. Topics include the use of functional programming and multi-threaded algorithms. Prerequisite: grade of C- or higher in Computer Science 215; or permission of instructor. Pre or corequisite: Mathematics 152.
- 319 **Database Systems Design (3)**Spring Odd
A study of the design, development, and implementation of an information system for management. Topics include database architecture, data definition and manipulation, report generation, and high-level language interface. Prerequisites: Computer Science 115, 120.
- 331 **Client/Server Programming (3)**.....Fall Odd
An introduction to software development in a networked computing environment. Focus will be on development of web-based software solutions employing tools such as scripting languages for both the client (browser) side and the server side. Prerequisite: Computer Science 115. Corequisite: Computer Science 120.
- 340 **Advanced Topics in System-Level Programming (3)**.....Spring Even
A study of the relationship between the instruction set architecture of a computer and the software running on it, as mediated through the operating system. Topics include assembly-language programming, processor modes, memory management and virtual storage, multiprocessing, multithreading, deadlock, and systems security. Prerequisites: Computer Science 205 or Engineering 204; Computer Science 315; or permission of instructor.

- 341- **Special Topics (3)**Occasional
 348 These computer science courses cover topics that maximize individual instructor strengths, interests, and competencies. Each course will deal with a topic in computer science not usually covered to any extent in regularly scheduled courses.
- 355 **Selected Topics in Security (3)**Spring
 Security is a core requirement when creating and maintaining systems and software. This course introduces students to various topics of computer security. The topic of security is too broad for one course, so topics may include vulnerability analysis, defense, exploitation, reverse engineering, or cryptography. Topics covered will maximize the individual instructor strengths, interests and competencies. Students may take this course a maximum of three times.
- 371 **Practicum (3)**.....Fall, Spring
 Students will be given the opportunity to apply principles and theories learned through course work. The assignment can be an on-campus or off-campus professional experience. Prerequisites: five Computer Science courses; junior standing or sophomore standing for Associate of Arts students.
- 390 **Technology and Society (3)**.....Spring
 An examination and critique of the relationship of technology to other areas of Western society. During the first half of the course students examine a Christian philosophy of technology and application is made to such problems as the role of the computer, technocracy, appropriate technology, and the historical two-cultures dualism. During its second half, the course focuses on the question of engineering ethics, with particular emphasis on such questions as safety and risk, professional responsibility and authority, whistle blowing, normative socio-economic structures, and morality in career choice. This course requires the student to write and orally present a significant thesis paper. Prerequisites: CORE 200; junior or senior standing. [Cross-listed: CORE 267, Engineering 390]
- 391- **Individual Studies (1-3)**Fall, Spring, Summer
 393 See page 120, Individual Studies

Construction Management

For a description of the Construction Management program see Business Administration: Construction Management on page 54 and Engineering Science: Construction Management on page 101.

- 101 **Principles of Construction Management (3)** Fall
 An introductory survey course in construction management that begins by building a Christian perspective on the task and calling of a construction manager or construction engineer. The course introduces methods of construction project planning, scheduling, delivery, quality, and control. It also introduces construction contract types, construction cost estimating and accounting, along with an overview of construction method, practice, and safety.
- 102 **Construction Communication and Architectural Graphics (2)**Spring
 This lab studio course introduces architectural and construction communication by practicing methods of construction documentation and preparation. The course will introduce students to basic plan reading. Construction planning computer applications and architectural computer-aided drafting will be explored and practiced.
- 207 **Geographic Information Systems and Surveying (4)**Fall Even
 An introduction to the acquisition, analysis, display, manipulation, and management of geographic information. Course topics will include geographical data input, storage, maintenance, analysis, and retrieval. Students will utilize common GIS software and associated hardware. An overview of survey methods used to gather and quantify features of physical geography will be included. The course will meet in two studio lab classes to provide an integral learn-by-doing experience applying GPS technology, survey methods, and GIS applications. Application of GIS to agriculture, business, environmental management, and other disciplines will be provided in this course. Prerequisite: sophomore standing or above. [Cross-listed: Agriculture 303, Business Administration 303, Environmental Studies 303]
- 213 **Statics for Construction Management (2)** Fall
 A mechanics course that examines the effects of forces on statically determinate rigid bodies in equilibrium, including the analysis of determinate truss structures. This course is a subsection of Engineering 208. Prerequisites: Mathematics 152; Physics 201 or 215.
- 214 **Mechanics of Materials for Construction Management (2)**Spring
 A mechanics course that examines the stresses, strains, and deformations that develop when various loads are applied to deformable bodies, including beams and columns. This course is a subsection of Engineering 212. Prerequisite: Construction Management 213 or Engineering 208.
- 220 **Construction Materials and Methods (4)**Fall Odd
 A comprehensive study of the properties, sources, processing, methods, sequences, and equipment used in residential and commercial construction projects. Planning and managing of the construction process, including an introduction to structural and finish systems that

make up building structures, are investigated. Appropriate application and responsible use of materials for design and functional intent is investigated. The environmental impact of construction is discussed. Prerequisite: Construction Management 101.

- 225 **Construction Safety and Quality (2)**Spring Odd
A study of safety and quality control as it relates to construction management. An emphasis on the legal and financial impacts of safety and quality management is included, as well as a discussion of the ethical and regulatory issues involved. Causes and effects of safety and quality deficiencies in construction and the related methods to minimize these deficiencies. Prerequisite: Construction Management 101. Corequisite: Statistics 131 or 132.
- 240 **Mechanical and Electrical Systems (3)**Spring Even
A study of the construction of mechanical and electrical systems, emphasizing principles of heating, cooling, ventilation, water supply, waste disposal, and electrical distribution. An introduction to mechanical, electrical, and plumbing codes and design software included. Energy conservation issues, sustainable design principles, and use of renewable energy are addressed. Prerequisite: Construction Management 220.
- 270 **Project Management (3)**Fall
This course is an introduction to the field of project management. The primary objective is to acquaint students with a broad basic overview of project management and the role of a project manager throughout the five primary processes of managing projects. The course will also cover common agile methodologies and principles because of how they relate to project management. The agile project management process encourages frequent inspection and adaptation, teamwork, accountability, self-organization, best practices that allows for rapid delivery and high quality, and a business approach that aligns development with customer needs and company goals. Prerequisite: sophomore standing. [Cross-listed: Business Administration 270, Computer Science 270]
- 280 **Construction Estimating (4)**Spring Even
An introduction to construction estimating and bid preparation with an emphasis on quantity takeoff. Includes a detailed study and application of pricing, subcontract evaluation, and bidding techniques using blueprints and specifications. Project types studied include residential, light commercial, and commercial building projects. Prerequisite: Construction Management 101.
- 318 **Soil Mechanics and Foundation Design (4)**Fall
A study of the engineering principles relating to soil properties and foundation design. The material properties of soil including structure, index properties, permeability, compressibility, and consolidation will be explored. Methods of soil testing, identification, and remediation will be covered. Principles of settlement and stresses in soils will be considered. Slope stability, retaining walls, and bearing capacity of shallow foundations will be introduced. The soils lab will provide hands-on opportunities to determine water content, perform sieve analyses, and test liquid, plastic, and shrinkage limits. Soil classification, compaction, compression, and consolidation testing will be explored. Prerequisite: Engineering 212 or Construction Management 214. [Cross-listed: Engineering 318]
- 370 **Risk Management for Construction (2)**Spring Odd
A study of the systematic process used to minimize the degree of uncertainty and control risks in construction projects. An emphasis on identifying, analyzing, assessing, mitigating, transferring, and monitoring risk is included, as well as processes to implement risk management strategies at all stages in a construction project. Prerequisites: Construction Management 101, 270.
- 371- **Construction Management Internship (1-3)**Fall, Spring, Summer
373 An off-campus construction management experience that is intended to provide the student with the opportunity to apply knowledge, principles, and skills gained in the classroom in a project management role on a construction related project. Written and oral summary reports are required. Prerequisite: completion of two years of construction management curriculum.
- 391- **Individual Studies (1-3)**Fall, Spring, Summer
393 See page 120, Individual Studies

Core

- 100 **Kingdom, Identity, and Calling (2)**Fall, Spring
Introduces incoming students into the vision, expectations, and community of Dordt University. Students examine their belief in Christ and seek their identity and calling in God's kingdom.

COMMUNICATION COMPETENCY

- 110 **Communication Foundations (3)**Fall, Spring
Examines the ways in which communication is used in the public sphere to create, maintain, and change culture. Students apply understandings of the concepts of culture and communication to a range of contemporary social issues, cultural texts, and communication practices. Emphasis is given to public speaking, to listening skills, and to rhetorical methods for analyzing and constructing oral and written arguments. Students also work cooperatively on researching and designing larger class presentations.

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Active participation in **Communication 051: Forensics** for an entire academic year also fulfills competency requirement.

ENGLISH COMPETENCY

- 120 **English Composition (3)**Fall, Spring, Summer
Students will write a number of essays and a research paper. As they work on these, they will become aware of writing as a process and develop skills in generating ideas, revising, and editing. They will also review traditional grammar and principles of usage and style.
- Writing-Intensive Courses:** English 220, 305, 306, English/Communication 301, English/Communication 302, History 280, Psychology 366, Theatre Arts 365.
- 130 **Health, Sport, and the Body (1.5)**Fall, Spring, Summer
A study of the concept of fitness and health from a Christian view of humankind. Designed to help students evaluate their own physical needs and strengths. This course assists students in developing their personal exercise and activity program. Preferably should be taken in the freshman year. Graded.
- 135 **Introduction to Lifetime Activities (.5 per component)**..... Fall, Spring
Students will complete up to three lifetime fitness activity components. Each activity component focuses on the lifetime fitness and health principles learned in CORE 130.
- 140 **Roots of Western Culture and Worldviews (3)**..... Fall, Spring
A study of the roots and formation of Western culture from ancient times to the early modern period, in the light of a biblical view of history. Special attention is given to the synthesis of and tensions between classical, Christian, and Germanic worldviews and cultures.
- 145 **Western Culture in Global Context (3)**..... Fall, Spring
Continuation of CORE 140. A study of the emergence of modern and contemporary Western culture in its increasingly global context. Prerequisite: CORE 140; or permission of instructor.
- 150 **Biblical Foundations (3)**Fall, Spring, Summer
A survey of biblical revelation in its progressive unfolding of key ideas and institutions against their cultural-historical background and within their covenant setting. Emphasis is placed on the normativity of Scripture that reaches its fullness and fulfillment in Christ for all academic work.
- 160 **Introduction to the Arts (3)**Fall, Spring, Summer
Students choose from a variety of sub-courses in art, drama, film, and music topics that are of interest to them. Students also fulfill requirements by attending special arts events and lectures.
- 175 **Early Modern Western Culture and Worldviews (2.5)**..... Fall
A study of the formation and development of Western Culture primarily from the Renaissance to just before the French Revolution with some attention given to its ancient, classical, and medieval roots, in the light of a Biblical view of the past. Special attention is given to the synthesis of and tensions between classical, Christian, and Enlightenment worldviews and how these forces have helped shape and guide Western culture more broadly and the areas of agriculture and manufacturing more specifically.
- 176 **Modern Western Culture in Global Context (2.5)**Spring
A continuation of CORE 175. A study of the continued development of Western culture from the French and Industrial Revolutions into the modern age with an increasing emphasis on the West's integration into a larger global context, and within the specific contexts of agriculture and manufacturing.
- 180 **Responding to Literature (3)**.....Fall, Spring, Summer
This course asks students to respond to poems, essays, stories, plays, a novel, and perhaps a film. Its purpose is to teach students how to understand these various forms and how to evaluate the moral vision when the imaginative world intersects with their own lives.
- 200 **Introduction to Christian Philosophy (3)** Fall, Spring
Using figures from the history of Western philosophy as our guide, this class will challenge you to examine your own life, see why you do what you do, and evaluate how your actions are shaped by certain religious commitments. It will demonstrate the need for wisdom and discernment and will begin to equip you with the tools you will need (critical thinking, self-reflection, clear communication) to discern how we are called to live as Christian disciples in today's day and age. Prerequisites: CORE 140, 150.

NATURAL SCIENCE

- 211 **Creation Care and the Environment (4)**..... Fall
An introduction to contemporary environmental studies and creation care, with emphasis on class discussion of relationships between human population and resource use in light of biblical teaching about environmental stewardship. Particular attention is given to the biotic

and ecological dimensions of creation stewardship and planetary distress. Three lectures and one laboratory period of three hours per week. [Cross-listed: Community Development 151, Earth Science 151, Environmental Studies 151]

- 212 **Human Biology I (4)** Fall, Spring
An overview of the structure and function of the human body, using an experimental approach. Addresses how worldview impacts the use of one's own body and guides ethical decision-making. Cadaver lab exercises will be included. Three lectures and one laboratory per week. For nursing, HHP, and other non-biology majors. [Cross-listed: Biology 203]
- 213 **Apian Biology: The Biology and Role of Honeybees in Creation (4)** Occasional
A course in the biology and role of honeybees in creation. Students will study the history, anatomy, and physiology of the honeybee as well as the management of honey bees including the role in the pollination of plants, honeybee health, reproduction, and the production of honey and beeswax. Three lectures and one laboratory period per week.
- 214 **Food: Connecting to Life (4)** Fall, Spring
Students will study our current food system from the producer to the consumer. Agricultural production practices, processing, and marketing will be considered in the context of cultural influences, environment, economics, politics, and social impacts. Using tools of scientific investigation, students will be asked to examine how systems of food production affect food chemistry, safety, preservation, marketing, and government regulations, and ultimately, society and the environment. Finally, students will examine how their faith commitment is shaped by an understanding of stewardship and global needs. The laboratory component includes growing, preserving, and preparing food along with visiting producers and processors.
- 215 **Science and Culture in Puerto Rico (3)** Occasional
While immersed in the biologically, geologically, and meteorologically diverse environment of Puerto Rico, students will engage in thoughtful consideration of our relationship with the rest of the creation. Major shaping questions include: What does it mean to be an image bearer and steward in the larger context of the whole creation? What are the dispositions and knowledge base required for careful stewardship? What does it mean to understand and study the creation scientifically? And, what are the scope and limits of scientific ideas in relation to eco-social problems? To fully engage these questions, students will participate in a variety of modes of scientific observation of the island of Puerto Rico, discuss texts related to environmental ethics by both Christian and non-Christian authors, and reflect on several texts related to the nature of science. Prerequisites: good standing with the registrar, student services, and the financial aid office; permission of instructor.
- 216 **God's Green Earth (3)** Fall
Welcome to the flora of North America! This is a course in field biology and taxonomy of vascular plants. Our study will focus on the native vegetation of the tall-grass prairie landscape with its associated gallery forests and wetlands. We will be comparing local studies to plant complexes from other geographic locations. Two lectures and one laboratory period per week. This course includes extensive field work and potentially several weekend field trips.
- 221 **Physics Applications and Implications (4)** Spring
The development of modern physics will follow a historical framework with particular attention given to the relationship between scientific discovery and Christian faith.
- 222 **Energy, Materials, and the Environment (4)** Spring
Flowing from a foundation in physical and earth sciences, this course offers an introduction to energy and material use in Western society and examines the resulting impact on the environment. Contemporary practices and their historical roots are critiqued in light of Biblical norms for stewardship. An emphasis on evaluation and implementation of practical steps toward sustainability permeates the course with the goal of motivating and equipping students to become lifelong stewards. The laboratory portion of the course combines tours, laboratory measurements, economic analysis, and environmental analysis. Three lectures and one laboratory period of three hours per week. [Cross-listed: Earth Science 152, Environmental Studies 152]
- 223 **Introductory Geology and Physical Geography (4)** Spring Odd
A general introduction to the physical nature and structure of the solid Earth, including, briefly, its physical geography and a more detailed look at its geology. The environmental implications of these subjects are detailed. Three lectures and one laboratory period of three hours per week plus one overnight field trip and one or two shorter trips. [Cross-listed: Earth Science 201, Environmental Studies 201, Geography 201]
- 224 **Solar System Astronomy (4)** Fall Odd
An introduction to the structure and diversity of the solar system, focusing on both the historical development of understanding of our cosmic "neighborhood" from the ancient Greeks to Einstein as well as recent discoveries and their implications for an improved understanding of our Earth. Students will obtain hands-on experience observing the heavens with naked eye, binoculars, and telescopes. The course involves three lecture hours and three observation/laboratory hours per week. Prerequisite: completion of Core Program mathematics requirement. [Cross-listed: Astronomy 121, Earth Science 121]

UNDERGRADUATE ACADEMIC OFFERINGS: CORE

- 225 **Stellar and Galactic Astronomy (4)**Fall Even
An introduction to stellar and galactic astronomy, focusing on the historical development of understanding of the cosmos as well as recent discoveries and their implications. Topics include the classification and explanation of stars, stellar life-cycles, remnants of stellar collapse (white dwarfs, neutron stars, black holes), galaxies, and cosmology (the study of the universe as a whole). Students will examine origins in light of Scripture and modern scientific evidence. Students will also obtain hands-on experience observing the heavens with naked eye, binoculars, and telescopes. The course involves three lecture hours and three observation/laboratory hours per week. Prerequisite: completion of Core Program mathematics requirement. [Cross-listed: Astronomy 122]

Any lab based science course from agriculture, astronomy, biology, chemistry, engineering, environmental studies or physics also fulfills the natural science requirement.

QUANTITATIVE REASONING

Any mathematics or statistics course numbered 120 or higher.

PERSONS IN COMMUNITY (CORE 250-259)

- 251 **Lifespan Development (3)**.....Fall, Spring, Summer
This course studies the growth and maturation of persons throughout the entire lifespan, including examination of physical, cognitive, personality, social changes, faith development, and other developmental tasks. This course will also focus on evaluating the theoretical issues and descriptive information portraying the growth of an individual from conception through late adulthood. Students will develop a biblically-informed vision of who we are as image-bearers of God and what it means to be humans living in God's creation. [Cross-listed: Psychology 204]
- 252 **The Social Psychology of Persons (3)** Fall, Spring
We influence and are influenced by culture, social structures, groups, personality, family, and the media, just to name a few. Studying the situational and personal/interpretive factors that influence an individual's social behavior can reveal new insights about the grace and sin at work in our relationships and social situations. Utilizing a biblical perspective on the social psychology of persons, this class will explore how students can function as faithful Christians within all of these situations. [Cross-listed: Psychology 210, Sociology 210]
- 254 **Interpersonal Communication (3)** Fall, Spring
The study of concepts, problems, and responsibilities in communication between two or more persons, focusing on conversation with consideration of many variables and contexts. [Cross-listed: Communication 222]
- 255 **Educational Psychology (3)**..... Fall, Spring
This course introduces you to the fields of educational psychology and developmental psychology as they help us figure out the teaching and learning environment. This course studies the growth and maturation of children and adolescents, including examination of physical development and activity, cognitive, social, emotional, and spiritual development. We will also look at different roles teachers play such as teacher-as-researcher, teacher-as-observer, and teacher-as-facilitator. This course introduces you to developmental theories and learning theories that impact PreK-12 education today. Prerequisite: Education 101. [Cross-listed: Education 135]
- 256 **Vulnerable Populations (3)**.....Spring
A historical and contemporary analysis of groups considered vulnerable by economic and social standards in American society. Causes, consequences, and implications for society are examined from a biblical view of humankind with an emphasis on social work practice. [Cross-listed: Sociology 215, Social Work 215]
- 258 **Leading and Serving Others (3)**..... Summer
This course is designed to be a general elective for students in any major. Leadership studies involves the study of human behavior and how individuals influence that behavior. This course will reflect a diversity of perspectives on leadership and motivation. Students will examine different models, skills, and styles of leadership, review common traits of effective leaders, and evaluate, from a Christian perspective, the ethical and moral issues facing leaders.

JUSTICE AND STEWARDSHIP (260-269)

- 260 **Personal Financial Management and Stewardship (3)** Fall, Spring
Prepares students for the many financial decisions that they will be making during their lives in light of a Biblical and reformed view of stewardship. [Cross-listed: Business Administration 226]
- 261 **Sociology and Social Justice (3)**Fall, Spring, Summer
Includes an examination of culture, socialization, social structure, group behavior, and inequalities (of class, race, and gender), as well as identifying and analyzing the pressing problems in our world that requires an understanding of social change that occurs through collective action and social movements. Through an exploration of predominant sociological theories, students are able to contrast those with a

biblical worldview that challenges them to articulate how a reformed Christian understanding of creation (and norms) sin, redemption, and consummation may be used to positively affect social interaction, organizations, and institutions. [Cross-listed: Sociology 201]

- 262 **Introduction to Politics (3)**Spring
An introduction to the political dimension of life from a biblically-oriented perspective. Laying the foundation for political thought and practice, the course will examine scripture, models of how the church relates to culture, and examples of Christian engagement with the political world. It will also provide a brief survey of each of the fields of political science and raise practical questions about political involvement. [Cross-listed: Political Science 201]
- 264 **American National Politics (3)** Fall
A general introduction to the American political process—its foundations, external influences, institutions, political actors, and policymaking. [Cross-listed: Political Science 202]
- 265 **World Regional Geography: Peace and Justice on the International Stage (3)** Fall
A survey of major geographical regions of the world including politics, economics, and cultures. Emphasis is on the interrelatedness of regions and how peace and justice are linked to human flourishing. [Cross-listed: Geography 151]
- 266 **Economics and Christian Stewardship (3)**Spring
Seeks to expose students who are not majoring in business administration or accounting to a wide variety of principles, policies, institutions, and problems within the field of economics. It includes the discussion of concepts such as property, value, work, wages, prices, profits, Christian stewardship in the marketplace, and comparative economic systems.
- 267 **Technology and Society (3)**Spring
An examination and critique of the relationship of technology to other areas of Western society. During the first half of the course students examine a Christian philosophy of technology and application is made to such problems as the role of the computer, technocracy, appropriate technology, and the historical two-cultures dualism. During its second half, the course focuses on the question of engineering ethics, with particular emphasis on such questions as safety and risk, professional responsibility and authority, whistle blowing, normative socioeconomic structures, and morality in career choice. This course requires the student to write and orally present a significant thesis paper. Prerequisites: CORE 200; junior or senior standing. [Cross-listed: Computer Science 390, Engineering 390]
- 268 **Serving Christ's Kingdom Through Pro-Tech (2)**Spring
A capstone course that develops and applies a Reformational framework for Christian service in technical vocations, within agriculture and manufacturing fields, and explores the relationship of these fields to other areas of Western society. The framework is applied to current cultural topics such as the role, appropriateness, and impacts of technology and automation. The course explores dualisms that tend to separate faith and work and applies a Reformed perspective to questions such as safety and risk, professional responsibility and authority, social and economic structures, and career choice. [Cross-listed: TECH 268]

CROSS-CULTURAL STUDIES (270-289)

- 270 **Cross-Cultural Communication (3)** Fall, Spring
This course explores a variety of cross-cultural and intercultural communication experiences. We will explore the concept of culture and examine the relationship of culture and communication to build a framework for studying cross-cultural communication patterns from a variety of representative cultures (including North American culture). Special emphasis will be given to the influence of worldview, ethnic identity, and socialization on the process of communication. Overall, this course is designed to help you appreciate and understand different forms of communication and begin to develop a Christian perspective for the differences and relationships between cultures. [Cross-listed: Communication 270]
- 271 **Learner Differences (3)** Fall, Spring
Examination of individual differences and diverse cultures and communities-ethnicities, SES, immigrant, cognitive (SPED and TAG), gender, learning profiles, as well as English language learners. Focus on designing inclusive learning environments to meet high standards. Prerequisite: Education 101. [Cross-listed: Education 145]
- 272 **History of the Muslim World (3)**Spring Odd
A survey of the history of the Muslim world focusing on the Middle East, North Africa, and Southwest Asia. Primary emphasis is on the development and features of Muslim society and culture, the relations between Muslim and Western civilizations, and the sources of tension in the modern Muslim world. Not open to first-semester freshmen. Prerequisite: CORE 140. [Cross-listed: History 212]
- 273 **Latin America (3)**Fall Odd
A selective survey of the history of Latin America from pre-Columbian times to the present. Attention will be given to the indigenous and colonial origins of Latin American culture and society. Twentieth-century developments will be explored through a series of case studies. Not open to first-semester freshmen. Prerequisite: CORE 140. [Cross-listed: History 213]

UNDERGRADUATE ACADEMIC OFFERINGS: CORE

- 274 **East Asia (3)** Spring Even
The history of East Asia, paying special attention to China, Japan, and Indonesia in the early-modern and late-modern periods. The primary emphasis will be on east Asian responses to the challenges represented by Western ideas, commerce, and imperialism in its various expressions. Not open to first-semester freshmen. Prerequisite: CORE 140. [Cross-listed: History 214]
- 275 **Faith and Cultural Aspects in Health Care (3)** Fall
Students will engage in an introductory study of culture and its influence on behavior. Specific cross-cultural issues that affect health care delivery are discussed. Students will consider the worldviews of modern cultures and the implications for Christian discipleship; define health and illness as Christian individuals and part of the community as a whole; and comprehend traditional and alternative health care practices, incorporating religious beliefs, practices, and rituals. A phenomenological assessment is applied to the populations studied. Prerequisites: BSN major or junior standing; permission of instructor. [Cross-listed: Nursing 310]
- 276 **Diversity and Inequality (3)** Fall, Summer
Students examine the historical and contemporary factors related to diversity and inequality in North America and increase their appreciation for the contributions of diverse groups in culturally-pluralistic societies. The course assumes that human diversity is created good and explores how to discern that goodness after the Fall. Students assess their own biases in light of course material and increase their sensitivity to diversity. [Cross-listed: Criminal Justice 216, Social Work 216, Sociology 216]
- 277 **Ethnic American Literature (3)** Fall Odd
Students will read, discuss, and write about literature from four different ethnic American groups: African-Americans, Native Americans, Asian-Americans, and Mexican-Americans. Major writers from the four different groups will be read, including Douglass, Ellison, Wright, Walker, Erdrich, Silko, Momaday, Cisneros, Gilb, Chavez, Yamamoto, Tan, and Mura. Open to freshmen. [Cross-listed: English 203]
- 278 **World Music (3)** Spring Even
Examination of music heard in various contemporary world cultures, its aesthetic and stylistic aspects as well as its functions and underpinning ideas and values. [Cross-listed: Music 222]
- 279 **Cross-Cultural Dialogues Through Role-Immersion Games (3)** Spring
Students will immerse themselves in different cultures and worldviews playing three *Reacting to the Past* games where they assume character roles, as a member of various cross-cultural factions, to achieve their assigned victory objectives. Students will read numerous cross-cultural texts including primary and secondary source materials from and about that culture and articulate assigned worldviews in cross-cultural dialogue in public speaking and through numerous written papers. These games and assignments will form the basis of class discussion to help form a reformational approach to cross-cultural engagement among students.
- 281 **Puerto Rico: Language, Culture, and Society (3)** Occasional
Explore the historical roots and influences shaping Puerto Rico while improving your Spanish skills or learning some Spanish for the first time. Emphasis is placed on understanding the challenges and potential of Puerto Rico today. Students will engage in contact with locals through service projects, travel to different historical sights, and explore Puerto Rico's abundant natural beauty. Daily excursions will supplement onsite instruction and exploration. Spanish is not a prerequisite for this course.
- 282 **Serving and Learning in Hungary and Transcarpathia, Ukraine (3)** Occasional
Arrive in Budapest, Hungary and spend time exploring and studying Hungarian culture and history. Then spend two weeks living in Hungarian ethnic communities in rural Transcarpathia, Ukraine. Visit schools in the region and assist in teaching English to middle and high school students and adults. Absorb and experience the local culture and be of service in appropriate ways to people living in the post-communist era. There will be pre-trip orientation and assignments related to history, culture and language of the region.
- 283 **Dutch Culture and Reformed Worldview (3)** Summer
Study the identity of the Dutch people from prehistoric times to the present while living in the Netherlands for three weeks. Examine the history of the Calvinist heritage from the Synod of Dort through the contributions of Abraham Kuyper and others. Discover how the Reformed worldview has shaped various aspects of Dutch life and society, such as church, politics, trade, and land reclamation. Special attention will be given to events and sites relating to World War II. There are classes in the morning and field trips in the afternoon. Two-day trips to London and Normandy/Paris are part of the program. CORE 283 is not a language class and is open to students from any major.
- 284 **Culture, Missions, and Community Development in Nicaragua (3)** Occasional
The course will focus on culture, missions, and community development in Nicaragua in cooperation with the Nehemiah Center in Managua, Nicaragua. Through pre-trip orientation and assigned readings and a variety of in-country experiences, students will explore the history, culture, government, and social life of Nicaragua and examine how a variety of mission outreaches and community developments have attempted to offer assistance in Nicaragua. Utilizing representatives from a variety of agencies active in Nicaragua, the students will be involved in discussions about the future of Nicaragua and its relationship to the rest of the world, as well as having an opportunity to learn about the differing philosophies and implementation plans of these different mission agencies and community development organizations. Where possible, students will be given the opportunity to get involved in the day-to-day work of the agencies visited in Nicaragua.

- 285 **Korean Culture (3)**Occasional
Students will stay in Korea for three weeks in urban and rural areas and study its culture through religion and music. Both in a classroom setting and through travels, students will learn about the history and religions of Korea with emphasis on their modern development. They will experience Korean culture and music through personal relationships with Chong-Shin University students while they take lectures, discussions, and excursions together. This course is open to students of any major who have completed at least one year of college.
- 286 **Serving and Learning in Southern Africa (Zambia) (3)**Occasional
Arrive in Ndola, Zambia, and spend time exploring and studying Zambian culture and history. Spend two weeks living in the Northrise University dormitory with African students and/or in Zambian homes. Visit NGO's in the region and assist in teaching agriculture to Northrise students and other adults. Absorb and experience the local culture and be of service in appropriate ways to people living in this country that was a British colony until the 1960's. There will be pre-trip orientation and assignments related to history, culture, and language of the region.
- 287 **Encountering the Land of Israel (3)** Summer Occasional
Travel on location in Israel for a two-week, transformative immersion course covering the land, culture, and story of the Bible. Biblical study takes on new meaning as you relate it directly to your surroundings through activities and experiences that engage all your senses. Assignments include readings and lectures on the history, culture, archaeology, and geography of Israel, all framed within a Reformational perspective on how to read the Bible well and how to engage important political and religious issues that continue today. [Cross-listed: Theology 261]
- 289 **Dante's Divine Comedy and the Italian Renaissance (3)**Fall Odd
This course begins as an in-class seminar during fall semester and concludes with a week-long trip to Italy in January. After spending several of our on-campus weeks on Dante's Comedy, we will explore the transition between the medieval period and the Italian Renaissance, looking at how politics, art, business, science, and literature developed together under a Catholic worldview in Florence. After finishing the classroom part of the course, we will take a great trip to Florence, where we will see and study the city in person. [Cross-listed: History 329]
- 293 **Cross-Cultural Reflections (3)**Fall, Spring, Summer
A 'portable', supervised reading and journal-writing course that students complete while participating in a semester-long internship or practicum experience in a cross-cultural setting (following established criteria for cross-cultural experiences). The selected readings and journal-writing instructions are designed to help the student to bring coherence to both the inner journey that occurs when students reflect upon a significant experience in their lives and the external journey they make into a cross-cultural situation. The reading and reflective journaling is not intended to substitute for or replace the requirements for the internship/practicum, but rather to build on the total impact of the experience and to enrich the student's cross-cultural understanding.

ADVANCED REFORMED THOUGHT (310-329)

- 310 **History and Philosophy of Education (3)** Fall, Spring
This course examines how our societal perspectives and personal core beliefs affect the ways we "do school," see students, plan teaching and learning, and make curriculum. Students will draw on a variety of resources – those from the tradition of Reformed, Christian education, some more broadly Christian, and those from outside faith-based education thought, to construct a statement describing their own educational philosophy. While this course meets a requirement in the Teacher Preparation Program, it does not assume a background in teacher preparation. Students from outside teacher preparation are welcome. Prerequisite for teacher preparation students: Education 201 or 202 or 203; Prerequisite for all students: CORE 200. [Cross-listed: Education 300]
- 311 **Agriculture Senior Seminar (3)**Spring
An integration of departmental courses, research, and analysis of current topics with emphasis on Christian perspective for persons involved in agriculture. Issues will include government policies, world hunger, the family farm, meat production, and others. Three lectures per week. Prerequisites: CORE 200; junior or senior standing in the agriculture department; or permission of instructor. [Cross-listed: Agriculture 361]
- 312 **History of Science and Technology (3)**Spring
Enables the student to examine from a Reformed, biblical perspective the narrative of scientific unfolding and technological development as two human activities that are manifest in all cultures. Emphasis is on the major paradigms and events that have shaped the development of science and technology in the West and most recently in North America. The course focuses on the historical activity of engineers and artisans, while investigating the interrelationship between scientific thought and technological development. Events and ideas such as the philosophical origins of Western science, the Copernican revolution, Enlightenment rationalism, the industrial revolutions, 20th century positivism, the Einsteinian revolution, and the modern systemization ethic are discussed. Prerequisites: CORE 140, 200. Corequisite: CORE 145. [Cross-listed: Engineering 310]
- 313 **Church, State, and Social Welfare (3)**Spring
This course examines the question of which societal sphere is responsible for protecting vulnerable people. The course will follow the historical path of development of the modern social welfare institution, with a particular focus on the Progressive Era and the birth of social work and public administration. Students will examine structure, development, and contemporary response through discussion, research

UNDERGRADUATE ACADEMIC OFFERINGS: CORE

and varied readings on the biblical call to care for our neighbor, charity, social justice, and the normative role of the state and the church. Students will wrestle with this fundamental question: “How must I, acting alone, or in combination with others, behave towards vulnerable people?” Prerequisite: CORE 200. [Cross-listed: Social Work 313]

- 314 **Christian Mind and Heart (3)**Spring Odd
In conversation with great thinkers of the past, we will discuss the biblical foundation for Reformed thinking, the responsibility of humans to fulfill our mission as image-bearers in God’s world, and the development of a Reformed world and life view for actual Christian thinking and living. Students will explore significant issues of Christian life through personal and group projects that engage particular aspects of their major studies or life vision. Prerequisite: CORE 200 or Theology 210. [Cross-listed: Theology 323]
- 315 **Perspectives in Physical Science (3)**Fall Even
Historical, philosophical, and theological perspectives on the physical sciences are discussed and developed. The historical and contemporary roles of Christianity and other influential forces in science are considered. Prominent positions in the philosophy of science are examined. Aspects of the complex interactions between Christian faith and the physical sciences are discussed. Prerequisites: CORE 200; completion of the Core Program natural science requirement with a physical science course (Astronomy, Chemistry, Physics, or CORE 220-229). [Cross-listed: Chemistry 305, Physics 305]
- 316 **Aesthetics (3)**Spring
A study of the aesthetic dimension of creation, the nature and qualifying function of artistic activity, and artifacts, and an introduction to general aesthetic theory and its history. Prerequisite: CORE 200. [Cross-listed: Philosophy 206]
- 317 **Professional Practice Development in Society (3)**Spring
This capstone course concentrates discussion of Christian nursing practice within a broader perspective of a Reformed Christian worldview. It examines conflicting worldviews, prominent theoretical frameworks used to explain and guide professional nursing practice, and the integration of Christian caring while performing the various roles of the professional nurse. Students develop their individual philosophical perspective of nursing practice. The ability to conceptualize issues, apply critical thinking, theoretical reflection, and serviceable insight to political, economic, and psychosocial issues and trends affecting nursing and health care is facilitated. Prerequisites: CORE 200; enrollment in BSN program; or permission of instructor. [Cross-listed: Nursing 390]
- 318 **Theology of the Reformation (3)**Spring Even
This course focuses on Luther and Calvin against their historical and theological backgrounds in order to understand the foundation of Protestant theology and thought. By studying both their classical works and secondary sources, students will critically understand how the fundamental doctrines began to be shaped in the 16th century and how they developed in the centuries following. Theological method, spirituality, and culture of the Reformation theology will be discussed along with the landmark doctrines concerning Scripture, sin and grace, salvation, and church. Prerequisite: CORE 200 or Theology 210. [Cross-listed: Theology 324]
- 320 **Economics and Religious Belief (3)**Spring
An interdisciplinary exploration of the complex relationship between worldviews and economic outcomes, with special attention to the impact of worldview on wealth creation, economic development, and ideas about how to measure these things. We will discuss topics as diverse as the study of economically-important differences among belief systems; the influence of specific belief systems on the development of economies; variations in how economic progress is measured at the individual, company or country level; and the implications of a reformed, Christian worldview for economic development and policy. Prerequisites: CORE 200; junior or senior standing.
- 321 **Perspectives on Origins (3)**Fall Odd
A study of the philosophical, theological, and scientific aspects of evolutionary theory and the creation-evolution debate. The course will use a seminar format in which students will be required to articulate and critically analyze the different positions on origins. Not open to freshmen. Prerequisites: one college science course; CORE 200. [Cross-listed: Biology 251]
- 323 **History and Theory of Literary Criticism (3)**Occasional
Major works of literary criticism and theory of criticism, both classic works from Plato through Eliot and key works drawn from the ferment of contemporary theory will be analyzed, with the aim of formulating clearer Christian theories of literature. Prerequisite: CORE 200. English 210 recommended. [Cross-listed: English 333]
- 324 **History of Psychology and Worldview (3)**Fall
A brief study of the historical development of psychological theories from the ancient world to the present, with extended treatment given to major contemporary movements or perspectives in psychology (such as psychoanalysis, behaviorism, and humanism) and to recent attempts by Christians to “integrate” theology and psychology. Prerequisites: CORE 200; Psychology 201; senior standing. [Cross-listed: Psychology 384]

- 325 **History of Calvinism (3)**Occasional
A study of historic Calvinism as it was expressed by John Calvin and those who followed in his name. Explores the permutations and applications of Calvinism through time including, but not limited to, Counter Remonstrants, English and American Puritans, Hungarian Calvinists, Afrikaners, and the modern Dutch Calvinist movement. Prerequisites: CORE 140, 200. Some European history recommended. [Cross-listed: History 335]
- 326 **Faith, Emotions, and Being Human (3)**Fall Even
A survey of different non-Christian views about the nature, place, and task of man, and a study of the main themes of a Christian theory of man. Prerequisite: CORE 200. Open to juniors and seniors in all disciplines. [Cross-listed: Philosophy 350]
- 399 **Calling, Task, and Culture (3)**Fall, Spring
This is an inter-disciplinary, capstone Core Program course that helps you reflect upon issues you encounter in your life, evaluate them from a Christian perspective, and live out a biblical perspective as a disciple of Christ. Prerequisites: CORE 140, 150, 200; second-semester junior or senior standing.

Criminal Justice

General Major– Criminal Justice 101, 201, 202, 203, 205, 216, 250, 304, 305, 323, 324, 325, 350, 360, 373; Political Science 214 or 245; Spanish 258. Students are advised to consider taking a minor in addition to this program.

General Minor– Criminal Justice 101, 250; one from Criminal Justice 201, 202, 203; Criminal Justice 304 or 305; Criminal Justice 323 and 324 or Criminal Justice 360 and 373.

- 101 **Introduction to Criminal Justice (3)** Fall
Overview of the criminal justice system, including criminal justice research, criminal law, procedure, evidence, criminology, victimology, policing, the courts, and corrections. Students will explore how our views of crime and the criminal justice system have been influenced by government leaders and the media. Students will also seek to apply biblical norms to our analysis of the criminal justice system with suggestions on reform.
- 201 **Policing (3)**Fall Odd
This course provides an overview of the history, function, administration, and challenges facing modern police. Emphasis will be placed on major reform efforts, including evidence-based practices, community policing, and the challenges of militarization. Students will also evaluate the role of police in society, especially within the framework of a biblical, Reformed worldview.
- 202 **Corrections (3)**Spring Even
This course provides an overview of the various means used to punish criminals and protect society. Students will develop an understanding of the concepts of incarceration, prison management, and rehabilitation (penology), especially in the United States. Students will study correctional philosophies, the challenge of prison violence and subcultures, rehabilitation efforts, and recidivism. This course will encourage students to critically assess the challenges facing the American correctional system through evidence-based policy analysis and comparative study of international approaches.
- 203 **Juvenile Justice (3)**Spring Even
Students will review causal theories of juvenile crime and will also examine the history and philosophy of the treatment of juveniles in the criminal justice system and the goals and effectiveness of the system. Promising alternatives rooted in a biblical reconciliation worldview will be included. Problems such as gangs, drug usage, and school violence will also be explored. The emphasis will be on how to be a salt and a light in a strategic part of society.
- 205 **Crime Scene Investigation (3)**Spring
Students will become acquainted with the forensic sciences, learn how to gather evidence and use it to solve crimes, and understand how proper investigation promotes justice. Considerable emphasis will be placed on how to conduct interviews and interrogations, write reports, and testify in court. Students will learn how to evaluate criminal investigations in current and high profile cases. Students will apply biblical norms and discuss police ethics in conducting investigations. Intended for anyone interested in criminal investigation and hands-on learning.
- 216 **Diversity and Inequality (3)**Fall, Summer
Students examine the historical and contemporary factors related to diversity and inequality in North America and increase their appreciation for the contributions of diverse groups in culturally-pluralistic societies. The course assumes that human diversity is created good and explores how to discern that goodness after the Fall. Students assess their own biases in light of course material and increase their sensitivity to diversity. [Cross-listed: CORE 276, Social Work 216, Sociology 216]

UNDERGRADUATE ACADEMIC OFFERINGS: CRIMINAL JUSTICE

- 250 **Speaking and Writing for Public Service**.....Fall (Starting Fall 2020)
This course will help students develop their skills in interviewing, report writing, and giving court testimony, including a basic introduction to the rules of evidence and procedure as they pertain to this process. Students will engage the material through a series of simulations that allow them the opportunity to see the impact of decisions and performance in earlier phases of the process from initial contact to sworn testimony.
- 304 **Criminology (3)**..... Fall
A theory-based course that studies crime causation, typologies of crime, and crime control. It looks at both historical and modern theories, including those that look to individual, social, and structural causes. It also broadly analyzes the guardianship and enforcement functions of the criminal justice system. Students will be able to identify criminology theories in modern media and engage in theory-building exercises. Prerequisite: sophomore standing. [Cross-listed: Sociology 202]
- 305 **Victimology and Family Violence (3)**.....Spring Odd
The victimology section will look at the various harms suffered due to crime, how victims interact with various agencies and players, public reaction to victims, the victims' rights movement, and how to better serve the victims of crime through our criminal justice system. Students will also identify and describe the problem, measure its true dimensions, and review evidence and hypotheses of victimologists. In the family violence portion, theories on family violence will be analyzed, the consequences of family victimization will be considered, as well as how to recognize child abuse and understand the dynamics of partner violence. Students will analyze legal and enforcement responses, consider how institutional responses can prevent or lessen revictimization, and look to how a restorative justice model can alleviate some of the harms of victimization. Prerequisite: junior standing; or permission of instructor. [Cross-listed: Sociology 305]
- 323 **Criminal Law (3)**..... Fall
This course is an introduction to the basic concepts of criminal law focusing on a study of what constitutes particular crimes, both in the common law and by statute, including certain defenses. Principles learned in this course will help students develop a deeper ability to discern what constitutes fair administration of justice: dealing fairly with the accused while continuing to uphold the interests of both victims and society at large. Prerequisite: sophomore standing.
- 324 **Criminal Procedures (3)**.....Spring
This course continues the material covered in Criminal Law, this time focusing on the procedural protections guaranteed by the 4th, 5th, 6th, and 8th Amendments to the Constitution, helping students develop a more sophisticated understanding of things like searches and seizures and the right to an attorney. Students will learn the crucial role these protections play in protecting the rights of those suspected or accused of criminal activity. Prerequisite: Criminal Justice 323; or permission of instructor.
- 325 **American Constitutional Law (4)**.....Spring
This course focuses on the American Constitution as interpreted by the Supreme Court. Through analysis of landmark cases, this course will study both historical and recent developments in constitutional law with the goal of gaining deeper insight into the way our system works and the reasons for the freedoms we hold dear. Prerequisite: Political Science 202; junior standing; or permission of instructor. [Cross-listed: Political Science 322]
- 350 **Domestic Preparedness (3)** Fall
This course will introduce students to the complex issues surrounding response to a major incident, be it man-made (such as terrorism) or natural. Drawing on the roles of police as first responders, emergency management personnel, and protectors of public order, this course will look at major historic incidents, such as 9/11 and Hurricane Katrina, to encourage students to think critically about how to learn from the past and how to be always ready to pursue one's vocation, especially in times of trial. Prerequisite: Justice and Stewardship core requirement; junior standing.
- 360 **Senior Seminar in Criminal Justice (3)** Spring (Starting Spring 2021)
This capstone course to the Criminal Justice curriculum will integrate topics from across the discipline to help students critically evaluate the system as a whole. Students will discuss themes of justice, Christian perspective, and special consideration will be given to the most recent developments in news, technology, and popular culture regarding the criminal justice system. Prerequisite: Criminal Justice 373; or permission of instructor.
- 373 **Field Experience in Criminal Justice (3)** Fall, Spring
This field experience provides exposure to the type of activities in which Criminal Justice graduates are likely to be involved. Requires 8-10 on-site hours per week plus one hour of weekly supervision. Application deadline for the spring semester is November 1; deadline for the fall semester is April 1. Prerequisites: declared criminal justice emphasis or minor; junior or senior standing; approval of the department.
- 391- **Individual Studies (1-3)**Fall, Spring, Summer
393 See page 120, Individual Studies

Data Science

General Major— Computer Science 109, 115, 120, 215, 315, 319; Mathematics 152, 153, 201, 203; Statistics 132, 201, 212, 213, 215, 216, 220, 290, 371, 372.

Dutch

General Major— Dutch 101, 102, 201, 202; Linguistics 201; five courses from CORE 283, Dutch 204, 206, 208, 393, SPICE 148, 160, 270, 271 (for a description of the SPICE classes, see page 32); four semesters of Dutch conversation 251-258. Six credits in study-abroad courses are required.

General Minor— Dutch 101, 102, 201; Linguistics 201; three courses from CORE 283, Dutch 202, 204, 206, 208, SPICE 148, 160, 270, 271 (for a description of the SPICE classes, see page 32); three semesters of Dutch conversation 251-258. Three credits in study-abroad courses are required.

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| 101 | Elementary Dutch I (4) Fall
An introductory study of the language and culture of the Dutch-speaking people. Emphasis on the acquisition of oral and written language skills in a communicative context combined with the study of cultural etiquette and social customs. If desired, students can schedule extra sessions with advanced students (often native speakers) to practice oral skills. |
| 102 | Elementary Dutch II (3) Spring
Continuation of 101. Prerequisite: Dutch 101 or its equivalent. |
| 201 | Intermediate Dutch I (3) Fall
An intermediate course that continues the study of the language in a communicative context with emphasis on precision and expansion of linguistic skills. Emphasis is also put on the development of cultural understanding and sensitivity, studying people's values and beliefs as expressed in their economic, political, and religious systems. Dutch culture will be compared with our culture in the light of the cultural mandate. Prerequisite: Dutch 102 or its equivalent. |
| 202 | Intermediate Dutch II (3) Occasional
Continuation of Dutch 201. Prerequisite: Dutch 201 or its equivalent. |
| 204 | Literary and Cultural Readings (3) Occasional
Designed to develop reading skill and an appreciation for Dutch culture and literature with emphasis on contemporary literature. Permission will be granted for individual readings in academic areas of interest to the student. Prerequisite: Dutch 202 or department approval. |
| 206 | Dutch Culture (3) Occasional
Designed to cover many aspects of the Dutch way of life. Listening and speaking skills will be developed through classroom activities. Prerequisite: Dutch 201 or its equivalent. |
| 208 | World Literature II (3) Spring Even
See English 208 for course information. [Cross-listed: English 208, French 208, Spanish 208] |
| 251-
258 | Conversation (1) Fall, Spring
Designed to give the student practice in listening and speaking. The content of the courses will be altered each year. The class will meet two times each week. Graded on a pass/no record basis. Prerequisite: Dutch 201; or permission of instructor. |
| 281-
283 | Service-Learning (1-3) Fall, Spring, Summer
See page 120, Individual Studies |
| 301 | Dutch Phonology (3) Occasional
An application of the principles of general phonology to the sound system of Dutch. See Linguistics 301. Prerequisites: Dutch 201; Linguistics 201. |
| 341-
348 | Special Topics (3) Occasional
The topics for these courses will be chosen from the areas of literature, advanced language studies, culture, or teaching methods. The course offerings as well as the content will reflect student interest and need. Prerequisite: departmental approval. |
| 391-
393 | Individual Studies (1-3) Fall, Spring, Summer
See page 120, Individual Studies |

Earth Science

- 121 **Solar System Astronomy (4)**Fall Odd
An introduction to the structure and diversity of the solar system, focusing on both the historical development of understanding of our cosmic “neighborhood” from the ancient Greeks to Einstein as well as recent discoveries and their implications for an improved understanding of our Earth. Students will obtain hands-on experience observing the heavens with naked eye, binoculars, and telescopes. The course involves three lecture hours and three observation/laboratory hours per week. Prerequisite: completion of Core Program mathematics requirement. [Cross-listed: Astronomy 121, CORE 224]
- 151 **Creation Care and the Environment (4)** Fall
An introduction to contemporary environmental studies and creation care, with emphasis on class discussion of relationships between human population and resource use in light of biblical teaching about environmental stewardship. Particular attention is given to the biotic and ecological dimensions of creation stewardship and planetary distress. Three lectures and one laboratory period of three hours per week. [Cross-listed: Community Development 151, CORE 211, Environmental Studies 151]
- 152 **Energy, Materials, and the Environment (4)**Spring
Flowing from a foundation in physical and earth sciences, this course offers an introduction to energy and material use in Western society and examines the resulting impact on the environment. Contemporary practices and their historical roots are critiqued in light of Biblical norms for stewardship. An emphasis on evaluation and implementation of practical steps toward sustainability permeates the course with the goal of motivating and equipping students to become lifelong stewards. The laboratory portion of the course combines tours, laboratory measurements, economic analysis, and environmental analysis. Three lectures and one laboratory period of three hours per week. [Cross-listed: CORE 222, Environmental Studies 152]
- 201 **Introductory Geology and Physical Geography (4)**Spring Odd
A general introduction to the physical nature and structure of the solid Earth, including, briefly, its physical geography and a more detailed look at its geology. The environmental implications of these subjects are detailed. Three lectures and one laboratory period of three hours per week plus one overnight field trip and one or two shorter trips. [Cross-listed: CORE 223, Environmental Studies 201, Geography 201]
- 202 **Meteorology and Climate Change (3)**Fall Odd
Provides a general introduction to meteorology and weather. Climate and climate change in Quaternary times to the present are also considered. The implications of an anthropogenically enhanced greenhouse effect will be addressed, with particular attention given to the impact of these changes on the structure and function of ecosystems. Includes one or two field trips to relevant sites in the region. [Cross-listed: Environmental Studies 202, Geography 202]
- 227 **Paleontology (3)**Fall Occasional
An introduction to the major fossil plants and animals, and the environments (paleoecology) in which they are found. Three lectures, or two lectures and a two-hour laboratory per week. The course includes several Saturday field trips and one weekend field trip to the Pella area. Prerequisite: Biology 122; or permission of instructor. [Cross-listed: Biology 227]

Economics

- General Major—** Business Administration 101; Economics 202, 203, 232, 304, 305, 351; Mathematics 152; Statistics 131; 15 credits from Business Administration 201, Economics 303, 309, 315, 321, 334, 341-348, 393, Statistics 203, 215.
- General Minor—** Economics 202, 203; Mathematics 152; Statistics 131 or 132; three courses from Economics 232, 303, 305, 309, 315, 321, 334, 393. Economics 232 recommended.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 86-99, Teacher Preparation Program.

- 202 **Principles of Economics: Micro (3)** Fall
The study of allocation of scarce resources at the level of the individual, household, and firm. Included are human motivation and preferences, the market, the function of prices, supply, demand, perfect and imperfect competition, and selected policy questions. Christian views on the nature of humanity, human motivation, and the market are also studied.
- 203 **Principles of Economics: Macro (3)**Spring
An introduction to the study of human choice in the allocation of scarce resources, concentrating on the aggregate or national level. Economic systems, national income accounts and analysis, income distribution, fiscal and monetary policy, banking systems, economic growth, and selected economic policy problems are covered. Christian views on the origin and nature of economic resources and humankind's stewardship responsibilities are discussed. Prerequisite: Economics 202; or permission of instructor.

- 232 **Econometrics (3)**Spring
This course covers all of the topics in Statistics 201 and topics commonly used in economic applications of statistics: time series and forecasting, linear time series models, moving average, autoregressive and ARIMA models, data analysis and forecasting with time series models and forecasting errors. Meets at the same times as Statistics 201 plus two additional hours per week. Offered second half of spring semester. Credit will not be given for both Statistics 201 and 202. Prerequisite: Statistics 131 or 132. [Cross-listed: Statistics 202]
- 281- **Service-Learning (1-3)**Fall, Spring, Summer
283 See page 120, Individual Studies
- 303 **Money and Banking (3)** Fall
An analysis of the nature and function of money; the operation of the financial system; the organization, management and regulation of financial institutions; and the Federal Reserve Systems with special emphasis on the impact of monetary policy and financial institutions on the global economy. Prerequisites: Economics 202, 203.
- 304 **Intermediate Microeconomics: Theory and Application (3)**Fall Odd
Microeconomics is the study of rational choice behavior on the part of individual consumers and firms. In general, economists are interested in how market mechanisms solve extremely complex resource allocation problems. Microeconomic theory is based on the notion that individuals (and firms) have well defined objectives (e.g., maximizing utility or profits) and behave systematically according to the incentives and constraints of their economic environment. It is this framework which allows the economist to gain a fundamental understanding of the choices people make in an economic setting. This course lays the theoretical framework and provides detailed intermediate-level study of the theory of consumer behavior, production and costs, partial equilibrium analysis of pricing in competitive and monopolistic markets, general equilibrium, welfare, and externalities. A reformational Christian perspective will pervade throughout. Prerequisites: Economics 202, 203; Mathematics 152; Statistics 131 or 132; or permission of instructor. Economics 232 recommended.
- 305 **Intermediate Macroeconomics: Theory and Policy (3)**Spring Even
This course provides an intermediate-level study of large scale relationships between macroeconomics, the financial system, and stabilization policy. It is comprised of a theoretical, institutional, and empirical study of national income distribution, price levels, labor markets, and policy-induced economic stabilization. It is particularly concerned with fluctuations in economic activity and the implications of economic disequilibrium for public policy. A reformational Christian perspective will be employed to critically assess prevailing macroeconomic paradigms and systems. Prerequisites: Economics 202, 203; Mathematics 152; Statistics 131 or 132; or permission of instructor. Economics 232 recommended.
- 309 **Economic History of the United States (3)**Spring Odd
A history of the development of the United States from an economic point of view. To set the context for the U.S. experience, the course will trace the roots of American economic development back to European and Medieval Economic thought. The causes and effects of major historical events are analyzed using contemporary economic thought. Some of the economic institutions and policies that played an important role in U.S. economic history will be evaluated from a Christian perspective. Prerequisite: Economics 203; or permission of instructor.
- 315 **Government Finance (3)**Occasional
A study of government taxing and spending, primarily at the federal level. Christian and secular views on government economic activity, forms of taxation and their effects, debt financing, budget processes and problems are studied. The broad purpose of the course is to help students learn how to apply economic principles in an analysis of the effects of governmental policies, particularly tax and expenditure policies. Emphasis is on analytical skills. Prerequisites: Economics 202, 203; or permission of instructor.
- 321 **Global Economic Development (3)**Fall Odd
A study of economic aspects of poverty and underdevelopment in the modern world. Specific topics include the dimensions and nature of poverty in the world, characteristics and types of developing nations, theories of development, and emerging issues in development. We will also consider the implications of biblical principles for policy to promote economic development and alleviate poverty. Prerequisite: Economics 203; or permission of instructor.
- 334 **Economics of Natural Resources and the Environment (3)** Fall Even
A study of economic aspects of Christian stewardship in relation to the environment and use of natural resources. Major topics include biblical norms on creation, property rights, economic justice, the economic dimensions of current environmental problems and trends in resource use, institutions and social structures that affect environmental policy, economic theories related to resource use and environmental quality, and evaluation of current and proposed policies from a Christian point of view. Prerequisite: Economics 202; or permission of instructor. [Cross-listed: Environmental Studies 334]
- 341- **Special Topics (3)**Occasional
348 Courses on different topics of special interest, utilizing individual instructor strengths, interests, and competencies. Each course selected will involve a topic not usually treated in depth in regularly scheduled courses.
- 351 **Senior Business and Economics Ethics Seminar (3)** Fall, Spring
An integration of departmental courses involving student research and analysis on current topics in business and economics, with primary

emphasis on Christian perspectives for the businessperson and economist. Required for senior majors in business administration or economics. [Cross-listed: Business Administration 351]

391-	Individual Studies (1-3)	Fall, Spring, Summer
393	See page 120, Individual Studies	

Education

Master of Education Program See *Graduate Studies* section on pages 156-170.

Teacher Preparation Program The Teacher Preparation Program is built on a liberal arts base and on professional courses that prepare students for teaching in early childhood, elementary, middle, and secondary classrooms. Following successful completion of one or more of the four options listed below, students are recommended for the initial level of licensure granted by the State of Iowa.

Admission to the Program Application for admission to the Teacher Preparation Program is required. Application is completed through the Office of the Director of Teacher Preparation. The standards for admission to the program are described in the Teacher Preparation Program Handbook. Completed applications are evaluated by the education department and approved by the Teacher Preparation Committee.

The Teacher Preparation Committee takes the following formal actions:

- Admits applicants who have met all the criteria for admission.
- Conditionally admits applicants whose deficiencies can be remediated.
- Rejects applicants who do not meet the standards for admission. If denied admission, a student may reapply for admission after one semester by contacting the Director of Teacher Preparation. Generally, acceptance into the Teacher Preparation Program must precede approval for the professional year, including student teaching, by at least one semester. Each applicant is informed in writing of the decision of the Teacher Preparation Committee regarding admission to the program.

The following are the criteria for admission to the Teacher Preparation Program:

- Indicate to the Director of Teacher Preparation intention to apply to the Teacher Preparation Program.
- Pass a basic skills (reading, writing, mathematics) test. Students may choose to take either the College Basic Academic Subjects Examination (CBASE) or Praxis CORE tests. Qualifying scores are listed in the Teacher Preparation Program Handbook.
- Earn a cumulative GPA of 2.50 or above.
- Earn a GPA of 2.50 or above in each endorsement area.
- Earn a grade of C+ or higher in all level one education courses.
- Complete level one courses with key competencies met as indicated in the Teacher Preparation Candidate Assessment Plan.
- Demonstrate acceptable professional dispositions based on a dispositions for teaching interview with the education department along with recommendations from student services and the education department.
- For secondary and K-12 content majors, a recommendation from the respective content area department.
- Satisfy professional portfolio requirements at level one.
- Submit a current résumé to the candidate's education department advisor.

Approval for the Professional Year and for Student Teaching Student teaching is required of all students preparing for licensure. To receive graduation credit and a recommendation for licensure, student teaching must be completed at Dordt University. Application for approval for student teaching is required. Application forms are distributed or may be obtained from the Director of Teacher Preparation. The criteria for approval for student teaching are described in the Teacher Preparation Program Handbook. Completed applications are evaluated by the education department and approved by the Teacher Preparation Committee. Each applicant is informed in writing of the decision of the Teacher Preparation Committee regarding approval for student teaching.

The following are the criteria for approval for student teaching:

- Submit an application for student teaching.
- Earn a cumulative GPA of 2.60 or above.
- Earn a GPA of 2.60 or above in each endorsement area.
- Gain acceptance into the Teacher Preparation Program at least one semester prior to student teaching.
- Successfully complete level two courses with competencies as indicated in the Teacher Preparation Candidate Assessment Plan.
- Earn a grade of C+ or higher in all level two education courses.
- Demonstrate acceptable professional dispositions based on a dispositions for teaching interview with the education department along with recommendations from student services and the education department.
- For secondary and K-12 content majors, a recommendation from the respective content area department.
- Satisfy professional portfolio requirements at level two.
- Submit a current résumé to the candidate's education department advisor.

Requirements for Institutional Recommendation for Licensure To be recommended by the Teacher Preparation Committee for initial Iowa licensure, the teacher candidate must have completed student teaching and successfully met all standards described in the Teacher Preparation

Candidate Assessment Plan. Formal application for licensure is required. Application forms are distributed or may be obtained from the Director of Teacher Preparation. Completed applications are evaluated by the education department and approved by the Teacher Preparation Committee. Each graduate is informed in writing of the decision of the Teacher Preparation Committee regarding recommendation for licensure.

The following are the criteria for recommendation for initial Iowa teaching licensure:

- Complete an application form.
- Pass an FBI Criminal Background Check (including fingerprinting process).
- Submit payment of \$160 to the Iowa Board of Educational Examiners (\$85 licensure fee and \$75 background check). Fees are subject to change annually.
- Successfully complete student teaching including satisfactory completion of performance competencies for each teacher preparation program standard.
- Satisfy professional portfolio requirements at level three.

For degree completion, all teacher preparation graduates, regardless of the option being completed, must pass the state approved entry to the teaching profession exams. The Teacher Preparation Program offers two options:

- Two Praxis II tests: (1) a Professional Learning and Teaching (PLT) test applicable to the grade levels of the endorsement, and (2) a Content Knowledge test applicable to the subject area major of the endorsement chosen. Qualifying scores are set by the State of Iowa and are listed in the Teacher Preparation Program Handbook. There is a charge of approximately \$135* for each Praxis II assessment.
- The edTPA (Education Teacher Performance Assessment). Qualifying scores are set by the State of Iowa and are listed in the Teacher Preparation Program Handbook. There is a charge of \$300* for the edTPA assessment.

**Testing fees are subject to change annually. Information regarding selection of tests and passing scores is listed in the Teacher Preparation Program Handbook.*

Program Options and Requirements Successful completion of the program of courses in teacher preparation meets requirements for graduation and enables the student to satisfy the requirements for initial licensure from the State of Iowa.

Each program option in teacher preparation includes:

- Core Program requirements.
- Professional education requirements.
- Content course requirements in the selected endorsement program(s).
- Electives (depending on the program option selected).

Note the following Core Program requirements for teacher preparation students:

- Education 145 meets the Core Program *Cross-Cultural* requirement.
- Mathematics—all teacher preparation students take Statistics 131 to meet the Core Program *Quantitative Reasoning* requirement.
- Education 135 meets the Core Program *Persons in Community* requirement (CORE 250-259) and a professional education requirement.
- Education 300 meets the Core Program *Advanced Reformed Thought* requirement (CORE 310-329) and a professional education requirement.

Teacher preparation candidates choose from four major emphases. Several endorsement options are available under each emphasis.

Education Major: Education 101, 135, 145, 165, 209, 300, 239 or 369, 381, 382; fourteen credits of student teaching; Statistics 131; one of the following sequences of courses:

1. ELEMENTARY SEQUENCE: Education 201 or 202, 333, 335 or 336.
2. ELEMENTARY SUBJECT AREA SEQUENCE: Education 201 or 202, 265, 335 or 336.
3. SECONDARY SEQUENCE: Education 202 or 203, 265, 336 or 337.
4. VERTICAL SEQUENCE: Education 202, 265, 336.

OPTION I: Elementary General Classroom Content Major: Endorsement 102. Education 155, 175, 220, 331, 332, 334; Geography 151; Mathematics 108; one course from CORE 211, 212, 214; one course from CORE 222, 223, 224; completion of a 12 credit field of specialization from the available options. [Note: certain core requirements are also required for this major: CORE 140, 145, and core English competency requirement. Students with transfer credit for any of these core components must have the courses approved by the education department for the endorsement requirements.] Education 260 strongly recommended.

Fields of Specialization Note: unless indicated, a field of specialization does not provide the student with an endorsement area. A minor or major in any academic area offered by the university fulfills the requirements for a field of specialization.

1. ART: Art 201, 202; one course from Art 207, 208, 209; Art 216 or 218.
2. EARLY CHILDHOOD (PreK-K): Endorsement 103. Education 210, 320, 321, 322, 326.
3. ENGLISH/LANGUAGE ARTS: English 306, 336; one course from English 203, 207, 208; one course from CORE 110, Communication 311, 314.
4. ESL: Education 355; English 336; Linguistics 201, 301.

UNDERGRADUATE ACADEMIC OFFERINGS: EDUCATION

5. HEALTH: HHP 202, 209, 211; Sociology 225.
6. MATHEMATICS: Mathematics 108, 115, 149; Statistics 131 or 132.
7. MUSIC: Music 103, 103L, 104, 104L, 312; one semester each of Music 240 and Music 250.
8. PHYSICAL EDUCATION: three courses from Biology 203, HHP 205, 206, 207, 308; two courses from HHP 212-217.
9. READING: Education 175, 210, 265, 314; English 306.
10. SCIENCE: one course from Biology 125, CORE 211, 212; one course from Chemistry 110, 111, Physics 215; one course from Earth Science 121, 151, 201.
11. SOCIAL STUDIES: History 201 or 202; one course from History 212, 213, 214; Geography 151; Political Science 201.
12. SPANISH: Spanish 201, 202; Spanish 204 or 206; three credits from Spanish 251-258 or Spanish 301. Study-abroad courses are recommended.
13. SPECIAL EDUCATION: Education 210, 253, 315, 317.
14. SPEECH COMMUNICATION/THEATRE: Communication 180, 220; CORE 110; Education 262; Theatre Arts 102 or 384.
15. THEOLOGY: Theology 110; one course from Theology 211-214; one course from Theology 215-217; Theology 221 or 351.

Elementary Subject Area Minor Completion of the Elementary General Classroom Content Major along with one of the following subject area minors provides an additional endorsement or endorsements to teach in a specialized subject area in grades K-8. (The term “endorsement” and the endorsement numbers are part of the Iowa licensure code.)

1. ART: Endorsement 113. Art 201, 202, 216; two courses from Art 207, 208, 209, 210; two courses from Art 218, 225, 228, 230, 240; one course from Art 302, 316, 318, 325, 328, 330, 340. (Education 350 is required as a professional methods of teaching course.)
2. EARLY CHILDHOOD (PreK-grade3) INCLUDING SPECIAL EDUCATION: Endorsement 100. Education 170, 175, 210, 252, 320, 321, 322, 326.
3. ENGLISH/LANGUAGE ARTS: Endorsement 119. CORE 110; Theatre Arts 384 or Education 262; Education 155; English 201 or 202; English 306, 336; one course from English 241, 301, 302, 303, 304; one course from English 203, 205, 207, 208, 210, 314. (Education 333 is required as a professional methods of teaching course.)
4. HEALTH: Endorsement 137. Biology 203; HHP 101, 202, 205, 207, 209, 211; Sociology 225. (Education 360 is required as a professional methods of teaching course.)
5. MATHEMATICS: Endorsement 142. Mathematics 108, 115, 149, 152, 207; Computer Science 115; Statistics 131 or 132; 1-3 credits from mathematics courses numbered 148 or above to reach a minimum of 24 credits in mathematics. (Education 332 is required as a professional methods of teaching course.)
6. MIDDLE SCHOOL: Teacher candidates earn middle school teaching endorsements by completing Education 202, 333, 336, 239 or 369 and at least two of the following fields of specialization. (Education 239 or 369 must be completed in a grade 5-8 classroom.)
 - A. ENGLISH/LANGUAGE ARTS: Endorsement 1821. English 306, 336; Education 155; one course from English 203, 207, 208; one course from CORE 110, Communication 311, 314.
 - B. MATHEMATICS: Endorsement 1822. Mathematics 108, 115, 149; Statistics 131 or 132.
 - C. SCIENCE: Endorsement 1823. One course from Chemistry 110, 111, Physics 215; one course from Biology 125, CORE 211, 212; one course from Earth Science 121, 152, 201.
 - D. SOCIAL STUDIES: Endorsement 1824. History 201 or 202; one course from History 212, 213, 214; Geography 151; Political Science 201.
7. MUSIC: Endorsement 144. Music 103, 103L, 104, 104L, 205, 215, 222; one course from Music 206, 207, 208; one course from Music 206, 207, 208, 209, 305, 306, 318-319; four semesters of ensemble participation; Music 19; three semesters of Music 09; one semester each of Music 240 and Music 250. (The following are required as professional methods of teaching courses: Music 312, 313, 316, 317.)
8. PHYSICAL EDUCATION: Endorsement 146. Biology 203; HHP 101, 205, 206, 207, 208, 308; three credits from HHP 212-217, 325. (Education 360 is required as a professional methods of teaching course.)
9. READING: Endorsement 148. Education 145, 155, 165, 175, 210, 265, 314, 320, 321; English 306. (Education 333 is required as a professional methods of teaching course.)
10. SCIENCE: Endorsement 150. Three courses from CORE 221, Physics 215, 216, Chemistry 110, 122; two courses from CORE 212, Biology 122, 215; two courses from Environmental Studies 151, Astronomy 121, Earth Science 201, 202, 227. Biology 251 or Physics 305 recommended. (Education 334 is required as a professional methods of teaching course.)
11. SOCIAL STUDIES: Endorsement 164. CORE 266; Geography 151; History 201 or 202; one course from History 212, 213, 214; two courses from History 220-225, 230; two courses from Political Science 201, 202, 214, 312. (Education 331 is required as a professional methods of teaching course.)
12. SPANISH: Endorsement 133. Spanish 201, 202, 204 or 206, 300, 301, 302; Linguistics 201; three semesters of Spanish 251-258; one course from Spanish 304, 341-348, 393. Three credits in study-abroad courses are required. (Students completing both the Spanish and TESL en-

dorsements must take Linguistics 301 and Spanish 301L instead of Spanish 301.) (Education 355 is required as a professional methods of teaching course.)

13. SPECIAL EDUCATION: INSTRUCTIONAL STRATEGIST I: MILD/MODERATE: Endorsement 260. Education 145, 165, 210, 252, 253, 314, 317. (Education 315 is required as a professional methods of teaching course.)
14. STEM (SCIENCE, TECHNOLOGY, ENGINEERING, MATHEMATICS): Endorsement 975. One course from Chemistry 110, 111, Physics 215; one course from Biology 125, CORE 211, 212; one course from Earth Science 121, 152, 201; Computer Science 115; Engineering 112; Mathematics 152 or four math courses to include Mathematics 108, 115, 149 and Statistics 131 or 132; STEM 111, 112. (Education 353 is required as a professional methods of teaching course.)

Option II: Elementary Subject Area Classroom Emphasis Major: Completion of the Education Major: Elementary Subject Sequence along with one of the following subject area majors prepares the student for specialized subject area teaching in grades K-8 and allows the student to obtain the endorsement indicated. (The term “endorsement” and the endorsement numbers are part of the Iowa licensure code.)

1. ART: Endorsement 113. Art 201, 202, 216, 370; three courses from Art 207, 208, 209, 210; three courses from Art 218, 225, 228, 230, 240; two courses from Art 302, 316, 318, 325, 328, 330, 340. (Education 350 is required as a professional methods of teaching course.)
2. MUSIC: Endorsement 144. Music 103, 103L, 104, 104L, 203, 203L, 205, 215, 222; two courses from Music 206, 207, 208; one course from Music 204, 209, 305; Music 19; six semesters of Music 09; two semesters each of Music 240 and Music 250; four large ensemble credits. (The following are required as professional methods of teaching courses: Music 312, 313, 316, 317.)
3. PHYSICAL EDUCATION: Endorsement 146. Biology 203; HHP 101, 205, 206, 207, 208, 308, 325; two courses from HHP 212-217. (Note: HHP 212-217 are half-courses.) (Education 360 is required as a professional methods of teaching course.)
4. SPECIAL EDUCATION: INSTRUCTIONAL STRATEGIST I: MILD/MODERATE*: Endorsement 260. Education 145, 165, 210, 252, 253, 271, 272, 314, 317, 320. (Education 315 is required as a professional methods of teaching course.) *Note: This is not a stand-alone major. It must be combined with an additional content area endorsement.
5. WORLD LANGUAGE:
 - A. FRENCH: Endorsement 123. French 101, 102, 201, 202, 204, 206; Linguistics 201; four semesters of French 251-258. Six credits in study abroad courses to include advanced French study are required. (Education 355 is required as a professional methods of teaching course.)
 - B. SPANISH: Endorsement 133. Spanish 201, 202, 204 or 206, 300, 301, 302, 304; Linguistics 201; one course from Spanish 102, 207, 341-348, 393; four semesters of Spanish 251-258. Six credits in study-abroad courses are required. (Students completing both the Spanish and TESL endorsements must take Linguistics 301 and Spanish 301L instead of Spanish 301.) (Education 355 is required as a professional methods of teaching course.)

OPTION III: Secondary Subject Area Classroom Emphasis Major: Completion of the Education Major: Secondary Sequence along with one of the following subject area majors prepares the student for specialized subject area teaching in grades 5-12 and allows the student to obtain the endorsement indicated. (The term “endorsement” and the endorsement numbers are part of the Iowa licensure code.)

1. AGRICULTURE: Endorsement 112. Agriculture 101, 105, 111, 201, 221, 232, 252, 290, 302, 370; Chemistry 110 or 111, 122. (Education 352 is required as a professional methods of teaching course.)
2. ART: Endorsement 114. Art 201, 202, 216, 370; three courses from Art 207, 208, 209, 210; three courses from Art 218, 225, 228, 230, 240; two courses from Art 302, 316, 318, 325, 328, 330, 340. (Education 350 is required as a professional methods of teaching course.)
3. BUSINESS-ALL: Endorsement 1171. Business Administration 100, 205, 206; two courses from Business Administration 200, 201, 202; Business Administration 301 or 302; one course from Business Administration 304, 306, 308; Economics 202, 203; one course from English 305, Communication 220, 228. (Education 359 is required as a professional methods of teaching course.)
4. ENGINEERING: Endorsement 974. Completion of an Engineering or Engineering Science Major (see pages 99-101, Engineering). (Education 353 is required as a professional methods of teaching course.) *Engineering or Engineering Science is an additional major so students should work with their advisors to plan their academic program completion timeline, which may require additional semesters.*
5. ENGLISH/LANGUAGE ARTS: Endorsement 120. Education 155; English 201, 202, 210, 306, 314, 316, 336; one course from English 241, 301, 302, 303, 304; one course from English COURSES FOR MAJORS; CORE 110. English 203, 312, and 333 recommended. (Education 354 is required as a professional methods of teaching course.)
6. ENGLISH/LANGUAGE ARTS-ALL: Endorsement 1201. Education 155, 265; English 201, 202, 210, 241, 306, 336; English 314 or 316; one additional course from English 205, 207, 208, 312, 314, 316; Communication 240, 314; CORE 110; Theatre Arts 102, 384. (Education 354 and 358 are required as professional methods of teaching courses.)

UNDERGRADUATE ACADEMIC OFFERINGS: EDUCATION

7. HISTORY:

- A. AMERICAN HISTORY and WORLD HISTORY: Endorsements 158 and 166. History 201, 280, 380; one course from History 212, 213, 214; three world history electives from History 212, 213, 214, 220, 221, 222, 223, 224, 225, 226, 230, 319, 321, 326, 327, 328, 335, 341-344; four American history electives from History 202, 301, 306, 307, 308. History 388 or 389 strongly recommended. (Education 356 is required as a professional methods of teaching course.)
- B. WORLD HISTORY: Endorsement 166. History 230, 280, 380; one course from History 212, 213, 214; seven history courses numbered above 201. A maximum of three courses may be from History 202, 301, 306, 307, 308, 345-348. At least three courses must be 300-level. History 388 or 389 strongly recommended. (Education 356 is required as a professional methods of teaching course.)

Students who complete a history major can add an endorsement in American government, economics, psychology, or sociology by completing fifteen semester hours in one of these social sciences:

- Endorsement 157–American Government. Political Science 202, 214, 322, 333, 370.
- Endorsement 160–Economics: Economics 202, 203, 303; two courses from Economics 309, 315, 321, 334. (Note: Economics 309, 315, 321, and 334 are offered in alternate years.)
- Endorsement 163–Psychology. Psychology 201, 210, 362; two courses from Psychology 218, 224, 374, 376.
- Endorsement 165–Sociology. Sociology 201, 216; three electives in sociology.

8. INDUSTRIAL TECHNOLOGY: Endorsement 140. Manufacturing 101, 112, 114, 202, 211, 212, 213; Statistics 131; TECH 113, 268, 271, 272. (Education 363 is required as a professional methods of teaching course.)

9. MATHEMATICS:

- A. MATHEMATICS: Endorsement 143. Mathematics 152, 153, 203, 207, 208, 212, 215, 291, 304, 311, 390, 392; Computer Science 115; Statistics 132. (Education 357 is required as a professional methods of teaching course.)
- B. MATHEMATICS/ENGINEERING: Endorsements 143 and 974. Engineering 112, 114, 115, 116, 117, 170, 202, 204, 208; Engineering 310 or 390; Mathematics 152, 153, 208, 212, 215, 304, 390; Physics 201; Statistics 132. (Education 353 and 357 are required as professional methods of teaching courses.)
- C. MATHEMATICS/PHYSICS: Endorsements 143 and 156. Computer Science 115; Mathematics 152, 153, 208, 212, 215, 304, 390; Physics 201, 202, 203; Statistics 132. (Education 353 and 357 are required as professional methods of teaching courses.)

10. MUSIC:

- A. MUSIC-CHORAL MUSIC EDUCATION: Endorsement 145. Music 103, 103L, 104, 104L, 203, 203L, 204, 206, 207, 208, 215, 222, 315, 323; one course from Music 205, 209, 305; Music 19; six semesters of Music 09; four semesters of Music 240; one additional semester from Music 240, 250, 260, 270; six semesters of Concert Choir or Chorale. (The following are required as professional methods of teaching courses: Music 312, 313, 316, 317.)
- B. MUSIC-INSTRUMENTAL MUSIC EDUCATION: Endorsement 145. Music 103, 103L, 104, 104L, 203, 203L, 204, 206, 207, 208, 215, 305, 315, 316-319; Music 19; six semesters of Music 09; four semesters of Music 270; Music 240 or 04; one additional semester from Music 240, 250, 260, 270; six semesters of Band or Orchestra. (The following are required as professional methods of teaching courses: Music 312, 314, 323.)
- C. MUSIC-CHORAL/INSTRUMENTAL MUSIC EDUCATION: Endorsement 145. Music 103, 103L, 104, 104L, 203, 203L, 204, 206, 207, 208, 215, 222, 305, 315, 316-319, 323; Music 19; six semesters of Music 09; four semesters of Music 240; four semesters of Music 270; four semesters of Concert Choir or Chorale; four semesters of Band or Orchestra. (The following are required as professional methods of teaching courses: Music 312, 313, 314.)

11. PHYSICAL EDUCATION: Endorsement 147. Biology 203; HHP 101, 205, 206, 207, 208, 308, 325; two courses from HHP 212-217. (Note: HHP 212-217 are half-courses.) (Education 360 is required as a professional methods of teaching course.)

12. SCIENCES: (Single Academic Program Science Majors)

- A. BIOLOGY: Endorsement 151. Biology 122, 125, 180, 200, 215; three 3- or 4-credit courses from: Biology 210 or above, Agriculture 251, 315 (at least seven credits must be in biology); Chemistry 111 or 122 (Chemistry 122 recommended). (Education 351 is required as a professional methods of teaching course.)
- B. CHEMISTRY: Endorsement 152. Chemistry 111, 180, 212, 225, 231, 261, 271; three credits from chemistry courses numbered 200 or above; Mathematics 152. Chemistry 305 recommended. (Education 351 is required as a professional methods of teaching course.) Note: Mathematics 152 will fulfill the Core Program quantitative reasoning requirement for education majors.
- C. PHYSICS: Endorsement 156. Physics 201, 202, 203, 305; Mathematics 152, 153; three courses from Physics 206, 325, 326, 331, 337, 393. (Education 351 is required as a professional methods of teaching course.) Note: Mathematics 152 and 153 are pre or corequisites for Physics 201 and 202 and will fulfill the Core Program quantitative reasoning requirement for education majors. Most of the 300 level courses have additional prerequisites.
- D. ALL SCIENCES (BIOLOGY, CHEMISTRY, EARTH SCIENCE AND PHYSICS): Endorsement 185. Biology 122, 125; 1-4 additional credits of biology/life science; Chemistry 111, 122, 180; Earth Science 121, 151; 1-4 additional credits of earth/space science; Physics 215, 216; one course from CORE 221, 222, 225, Physics 127. (Education 351 is required as a professional methods of teaching course.)

SCIENCES: (Multiple Academic Program Majors)

The following endorsements in the sciences may be acquired by meeting the course requirements listed. Endorsements may be added to the

single academic program majors (biology, chemistry, or physics) above. Alternatively, combinations of two or more of the endorsement options listed below constitute a secondary education major in those endorsement areas.

- E. BIOLOGY: Endorsement 151. Biology 122, 125, 180, 200, 215. (Education 351 is required as a professional methods of teaching course.)
 - F. CHEMISTRY: Endorsement 152. Chemistry 111, 180, 212, 122 or 225, 251, 252. (Education 351 is required as a professional methods of teaching course.)
 - G. EARTH SCIENCE: Endorsement 153. Earth Science 121, 151, 201, 202, 227. (Education 351 is required as a professional methods of teaching course.)
 - H. PHYSICS: Endorsement 156. Physics 201, 202, 203; Mathematics 152, 153; one course from Physics 206, 325, 326, 331, 337, 393. (Education 351 is required as a professional methods of teaching course.) Mathematics 152 and 153 will fulfill the Core Program quantitative reasoning requirement for education majors. Most of the course options have additional prerequisites.
13. SOCIAL SCIENCE (AMERICAN GOVERNMENT, AMERICAN HISTORY, ECONOMICS, PSYCHOLOGY, SOCIOLOGY, WORLD HISTORY): Endorsement 186. History 201, 280; two courses from History 301, 306, 307, 308, 388*; one course from History 212, 213, 214; two courses from CORE 145, History 220, 221, 222, 223, 224, 225, 230, 319, 326, 335, 389* (students planning to teach in Canada are advised to take 230); Political Science 202, 214; Political Science 201 or 210; Psychology 201; one course from Psychology 210, 218, 224; Sociology 201; one course from Sociology 215, 216, 225; Geography 151; Geography 201 or 202; Economics 202, 203; Statistics 131. History 380 strongly recommended. (Education 356 is required as a professional methods of teaching course.) *Note: History 380 is a prerequisite for History 388 and 389.
 14. SPECIAL EDUCATION: INSTRUCTIONAL STRATEGIST I: MILD/MODERATE*: Endorsement 261. Education 145, 165, 210, 252, 253, 265, 271, 272, 314, 317. (Education 315 is required as a professional methods of teaching course.) *Note: This is not a stand-alone major. It must be combined with an additional content area endorsement.
 15. WORLD LANGUAGE:
 - A. FRENCH: Endorsement 124. French 101, 102, 201, 202, 204, 206; Linguistics 201; four semesters of French 251-258. Six credits in study abroad courses to include advanced French study are required. (Education 355 is required as a professional methods of teaching course.)
 - B. SPANISH: Endorsement 134. Spanish 201, 202, 204 or 206, 300, 301, 302, 304; Linguistics 201; one course from Spanish 102, 207, 341-348, 393; four semesters of Spanish 251-258. Six credits in study-abroad courses are required. (Students completing both the Spanish and TESL endorsements must take Linguistics 301 and Spanish 301L instead of Spanish 301.) (Education 355 is required as a professional methods of teaching course.)

Secondary Subject Area Classroom Emphasis with an Additional Academic Minor Completion of the Secondary Subject Area Classroom Emphasis Major along with a subject area major (described above) may add an additional grade 5-12 teaching endorsement by completing one of the following subject area minors. (The term “endorsement” and the endorsement numbers are part of the Iowa licensure code.)

1. AMERICAN GOVERNMENT: Endorsement 157. Political Science 201, 202, 214, 322, 333, 370; two courses from Political Science 245, 335, Criminal Justice 101. One course taken on the American Studies Program may be substituted for one of the courses. (Education 356 is required as a professional methods of teaching course.)
2. ART: Endorsement 114. Art 201, 202, 216; two courses from Art 207, 208, 209, 210; two courses from Art 218, 225, 228, 230, 240; one course from Art 302, 316, 318, 325, 328, 330, 340. (Education 350 is required as a professional methods of teaching course.)
3. BIBLE: No state endorsement is available. Theology 324, 331; two courses from Theology 211, 212, 213, 214; two courses from Theology 215, 216, 217, 323. (Education 261 is required as a professional methods of teaching course.)
4. BIOLOGY: Endorsement 151. Biology 122, 125, 180, 200, 215; a minimum of seven additional credits from: biology courses numbered above 210, Agriculture 251, 315. (Education 351 is required as a professional methods of teaching course.)
5. CHEMISTRY: Endorsement 152. Chemistry 111, 180, 212, 225, 251, 252; a minimum of seven additional credits from Chemistry 231, 261, 271, 321, 322, 323, 362. (Education 351 is required as a professional methods of teaching course.)
6. ENGLISH/LANGUAGE ARTS: Endorsement 120. Education 155; English 210, 306, 336; English 201 or 202; English 314 or 316; one course from English 241, 301, 302, 303, 304; one course from English COURSES FOR MAJORS. (Education 354 is required as a professional methods of teaching course.)
7. HEALTH: Endorsement 138. Biology 203; HHP 101, 202, 205, 207, 209, 211; Sociology 225. (Education 360 is required as a professional methods of teaching course.)
8. HISTORY-WORLD: Endorsement 166. History 280, 380; one course from History 212, 213, 214; three courses from History 201, 202, 220, 221, 223, 224, 225, 230; two courses from History 319, 326, 327, 335. (Education 356 is required as a professional methods of teaching course.)
9. MATHEMATICS: Endorsement 143. Mathematics 152, 153, 203, 208, 212, 215, 390; Computer Science 115; Statistics 132. (Education 357 is required as a professional methods of teaching course.)

UNDERGRADUATE ACADEMIC OFFERINGS: EDUCATION

10. MIDDLE SCHOOL: Teacher candidates earn middle school teaching endorsements by completing Education 202, 265, 336, 239 or 369 and at least two of the following fields of specialization. (Education 239 or 369 must be completed in a grade 5-8 classroom.) Teacher candidates must take one methods course from Education 331, 332, 333, 334, 351, 353, 354, 356 or 357 related to their field of specialization.
 - A. ENGLISH/LANGUAGE ARTS: Endorsement 1821. English 306, 336; Education 155; one course from English 203, 207, 208; one course from CORE 110, Communication 311, 314.
 - B. MATHEMATICS: Endorsement 1822. Mathematics 108, 115, 149; Statistics 131 or 132.
 - C. SCIENCE: Endorsement 1823. One course from Chemistry 110, 111, Physics 215; one course from Biology 125, CORE 211, 212; one course from Earth Science 121, 152, 201.
 - D. SOCIAL STUDIES: Endorsement 1824. History 201 or 202; one course from History 212, 213, 214; Geography 151; Political Science 201.
11. PHYSICAL EDUCATION: Endorsement 147. Biology 203; HHP 101, 205, 206, 207, 208, 308; three credits from HHP 212-217, 325. (Note: HHP 212-217 are half-courses.) (Education 360 is required as a professional methods of teaching course.)
12. PHYSICS: Endorsement 156. Physics 201, 202, 203, 325; three elective courses in physics. Most of the course options have additional prerequisites. (Education 351 is required as a professional methods of teaching course.)
13. SPANISH: Endorsement 134. Spanish 201, 202, 204 or 206, 300, 301, 302; Linguistics 201; three semesters of Spanish 251-258; one course from Spanish 304, 341-348, 393. Three credits in study-abroad courses are required. (Students completing both the Spanish and TESL endorsements must take Linguistics 301 and Spanish 301L instead of Spanish 301.) (Education 355 is required as a professional methods of teaching course.)
14. SPECIAL EDUCATION: INSTRUCTIONAL STRATEGIST I: MILD/MODERATE: Endorsement 261. Education 145, 165, 210, 252, 253, 314, 317. (Education 315 is required as a professional methods of teaching course.)
15. SPEECH COMMUNICATION/THEATRE: Endorsement 168. Communication 180, 240, 241, 314; CORE 110; Theatre Arts 102, 103, 382, 384. Communication 311 and Education 262 recommended. (Education 358 is required as a professional methods of teaching course.)
16. STEM (grades 5-8): Endorsement 976. One course from Chemistry 110, 111, Physics 215; one course from Biology 125, CORE 211, 212; one course from Earth Science 121, 152, 201; Computer Science 115; Engineering 112; Mathematics 152 or four math courses to include Mathematics 108, 115, 149 and Statistics 131 or 132; STEM 111, 112. (Education 353 and Education 357 are required as a professional methods of teaching courses.) This endorsement must accompany a 5-12 science, mathematics, or industrial technology endorsement.

Option IV: Vertical Subject Area Classroom Emphasis Major (provides endorsement to teach a content area at both elementary and secondary, grades K-12, levels): Completion of the Education Major: Vertical Sequence along with one of the following subject area majors prepares the student for specialized subject area teaching in both elementary and secondary and allows the student to obtain the endorsements indicated. (The term “endorsement” and the endorsement numbers are part of the Iowa licensure code.)

1. ART: Endorsements 113 and 114. Art 201, 202, 216, 370; three courses from Art 207, 208, 209, 210; three courses from Art 218, 225, 228, 230, 240; two courses from Art 302, 316, 318, 325, 328, 330, 340. (Education 350 is required as a professional methods of teaching course.)
2. MUSIC:
 - A. MUSIC-CHORAL MUSIC EDUCATION: Endorsements 144 and 145. Music 103, 103L, 104, 104L, 203, 203L, 204, 206, 207, 208, 215, 222, 315, 323; one course from Music 205, 209, 305; Music 19; six semesters of Music 09; four semesters of Music 240; one additional semester from Music 240, 250, 260, 270; six semesters of Concert Choir or Chorale. (The following are required as professional methods of teaching courses: Music 312, 313, 316, 317.)
 - B. MUSIC-INSTRUMENTAL MUSIC EDUCATION: Endorsements 144 and 145. Music 103, 103L, 104, 104L, 203, 203L, 204, 206, 207, 208, 215, 305, 315, 316-319; Music 19; six semesters of Music 09; four semesters of Music 270; Music 240 or 04; one additional semester from Music 240, 250, 260, 270; six semesters of Band or Orchestra. (The following are required as professional methods of teaching courses: Music 312, 314, 323.)
 - C. MUSIC-CHORAL/INSTRUMENTAL MUSIC EDUCATION: Endorsements 144 and 145. Music 103, 103L, 104, 104L, 203, 203L, 204, 206, 207, 208, 215, 222, 305, 315, 316-319, 323; Music 19; six semesters of Music 09; four semesters of Music 240; four semesters of Music 270; four semesters of Concert Choir or Chorale; four semesters of Band or Orchestra. (The following are required as professional methods of teaching courses: Music 312, 313, 314.)
3. PHYSICAL EDUCATION: Endorsements 146 and 147. Biology 203; HHP 101, 205, 206, 207, 208, 308, 325; two courses from HHP 212-217. (Note: HHP 212-217 are half-courses.) (Education 360 is required as a professional methods of teaching course.)
4. PHYSICAL EDUCATION AND HEALTH EDUCATION: Endorsements 137, 138, 146 and 147. Biology 203; HHP 101, 202, 205, 206, 207, 208, 209, 211, 308, 325; Sociology 225; two courses from HHP 212-217. (Note: HHP 212-217 are half-courses.) (Education 360 is required as a professional methods of teaching course.)

5. SPECIAL EDUCATION: INSTRUCTIONAL STRATEGIST I: MILD/MODERATE*: Endorsements 260 and 261. Education 145, 165, 210, 252, 253, 265, 271, 272, 314, 317, 320. (Education 315 is required as a professional methods of teaching course.) *Note: This is not a stand-alone major. It must be combined with an additional content area endorsement.
6. WORLD LANGUAGE:
 - A. FRENCH: Endorsements 123 and 124. French 101, 102, 201, 202, 204, 206; Linguistics 201; four semesters of French 251-258. Six credits in study abroad courses to include advanced French study are required. (Education 355 is required as a professional methods of teaching course.)
 - B. SPANISH: Endorsements 133 and 134. Spanish 201, 202, 204 or 206, 300, 301, 302, 304; Linguistics 201; one course from Spanish 102, 207, 341-348, 393; four semesters of Spanish 251-258. Six credits in study-abroad courses are required. (Students completing both the Spanish and TESL endorsements must take Linguistics 301 and Spanish 301L instead of Spanish 301.) (Education 355 is required as a professional methods of teaching course.)

Vertical Subject Area Classroom Emphasis with an Additional Academic Minor Completion of the Vertical Subject Area Classroom Emphasis Major along with a subject area major (described above) may add an additional grade 5-8 teaching endorsement by completing one of the following subject area minors. (The term “endorsement” and the endorsement numbers are part of the Iowa licensure code.)

1. MIDDLE SCHOOL: Teacher candidates earn middle school teaching endorsements by completing Education 202, 265, 336, 239 or 369 and at least two of the following fields of specialization. (Education 239 or 369 must be completed in a grade 5-8 classroom.) Teacher candidates must take one methods course from Education 331, 332, 333, 334, 351, 353, 354, 356 or 357 related to their field of specialization.
 - A. ENGLISH/LANGUAGE ARTS: Endorsement 1821. English 306, 336; Education 155; one course from English 203, 207, 208; one course from CORE 110, Communication 311, 314.
 - B. MATHEMATICS: Endorsement 1822. Mathematics 108, 115, 149; Statistics 131 or 132.
 - C. SCIENCE: Endorsement 1823. One course from Chemistry 110, 111, Physics 215; one course from Biology 125, CORE 211, 212; one course from Earth Science 121, 152, 201.
 - D. SOCIAL STUDIES: Endorsement 1824. History 201 or 202; one course from History 212, 213, 214; Geography 151; Political Science 201.

Other Endorsement Options

1. ATHLETIC COACH K-12: Endorsement 101: In the State of Iowa, you must be licensed to coach at the secondary level in the public school system.

There are two forms of coaching licensure - a coaching **authorization** and a coaching **endorsement**. Both the authorization and endorsement allow you to be employed as a head or assistant coach in any interscholastic athletic activity. Both licenses require courses in four conceptual areas: Coaching Theory, Lifespan Development, Physiology, and First Aid and Prevention of Athletic Injuries. These courses may be taken in any sequence over any length of time through Area Education Agency (AEA) workshops or for college credit.

The coaching **authorization** gives a non-education student the right to coach in the middle school or high school. The person is allowed to be the head or assistant coach for any sport following the completion of the coursework in the previous paragraph and filing an application for the authorization through the Department of Education of the State of Iowa (see contact information below). The coaching **endorsement** can be obtained by individuals who hold a teaching license and have completed the four required classes for college credit. Coaching Theory, Lifespan Development, and Physiology must be taken for one credit hour each and First Aid and Prevention must be taken for two credit hours. The coaching endorsement is automatically renewed with your teaching license. For information on licensure, see www.state.ia.us/boee/doc/faqs_cch.asp.

The following courses with an education major qualify an applicant to be a head coach or assistant coach in all sports at all grade levels.

Biology 203/CORE 212 - Human Biology I or HHP 206 - Exercise Physiology and Biomechanics
 HHP 207 - First Aid and Athletic Injuries
 HHP - Coaching Theory (one from HHP 212-217)
 Education 135 - Educational Psychology or Psychology 204 - Lifespan Development

These courses also meet the State of Iowa's requirement for the coaching authorization available for those who have not completed an education major. The coaching authorization allows the holder to be head coach or assistant coach in all sports at all grade levels.

2. TEACHING ENGLISH AS A SECOND LANGUAGE (TESL) K-12: Endorsement 104. Education 320, 349, 355; English 336; Linguistics 201, 301. (Students completing both the Spanish and TESL endorsements must take Spanish 301L.) Candidates interested in international education should complete their practicums in an international setting and also complete Education 270.

Associate of Arts Degree Options

The education department offers the following options for an A.A. degree leading to paraeducator certification from the State of Iowa. See the “Academic Program” section for the Core Program for all A.A. programs (pages 22-23).

UNDERGRADUATE ACADEMIC OFFERINGS: EDUCATION

1. **GENERALIST: Paraeducator Certification 950.** Completion of this option provides certification to work as a paraeducator generalist in pre-kindergarten through grade twelve classrooms. Education 101, 145, 155, 165, 175, 201 or 202, 204, 209; Psychology 204; nine additional credits from education courses.
2. **EARLY CHILDHOOD: Paraeducator Certification 951.** Completion of this option provides certification to work as a paraeducator early childhood specialist in prekindergarten through grade three classrooms. Education 101, 145, 165, 175, 201, 204, 320, 321, 322 or 326; Psychology 204; seven additional credits from education courses. Education 155 strongly recommended.
3. **SPECIAL NEEDS: Paraeducator Certification 952.** Completion of this option provides certification to work as a paraeducator special needs specialist in prekindergarten through grade twelve classrooms. Education 101, 145, 165, 175, 204, 314, 320; one course from Education 201, 202, 203; Education 332 or 333; one course from Education 210, 252, 253, 315; Psychology 204; three additional credits from education courses.
4. **ENGLISH AS A SECOND LANGUAGE: Paraeducator Certification 953.** Completion of this option provides certification to work as a paraeducator ESL specialist in prekindergarten through grade twelve classrooms. Education 101, 145, 165, 175, 204, 320, 333, 355; one course from Education 201, 202, 203; Psychology 204; six additional credits from education courses.

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| 101 | Introduction to Education (2) | Fall, Spring |
| | Designed to introduce students to the domain of education and to induct them into an initial understanding of teaching and the teaching profession. Emphasis is on the development of a distinctively Christian approach to education. Education 101 is a prerequisite to all other education courses. | |
| 104 | Pre-Student Teaching Field Experience I (.5) | Fall, Spring |
| | An optional 15 hour field-based practicum designed for students who do not complete Education 101 at Dordt University. Candidates will observe various K-12 classrooms and recognize qualities of effective teaching as identified by the Teacher Preparation Program (TPP) standards. Graded on a pass/no record basis. | |
| 135 | Educational Psychology (3) | Fall, Spring |
| | This course introduces you to the fields of educational psychology and developmental psychology as they help us figure out the teaching and learning environment. This course studies the growth and maturation of children and adolescents, including examination of physical development and activity, cognitive, social, emotional, and spiritual development. We will also look at different roles teachers play such as teacher-as-researcher, teacher-as-observer, and teacher-as-facilitator. This course introduces you to developmental theories and learning theories that impact PreK-12 education today. Prerequisite: Education 101. [Cross-listed: CORE 255] | |
| 145 | Learner Differences (3) | Fall, Spring |
| | Examination of individual differences and diverse cultures and communities-ethnicities, SES, immigrant, cognitive (SPED and TAG), gender, learning profiles, as well as English language learners. Focus on designing inclusive learning environments to meet high standards. Prerequisite: Education 101. [Cross-listed: CORE 271] | |
| 155 | Children's and Adolescent Literature (3) | Fall Odd, Spring |
| | This course focuses on the classroom use of literature for children and adolescents. It includes a variety of genres, fiction and nonfiction, technology- and media-based information, and non-print materials. It introduces the student to a wide range of authors and literature, including a variety of cultures, linguistic backgrounds, and perspectives. Ways to encourage reading and interacting with texts in the content areas are discussed and practiced. Prerequisite: Education 101. | |
| 165 | Learning Environments (3) | Fall, Spring |
| | Focus on designing and implementing developmentally appropriate and challenging learning experiences. Creating individual and collaborative learning environments including competency-based, cooperative learning, technology-supported, experiential, and other environments. Prerequisite: Education 101. | |
| 170 | Infant/Toddler Instructional Adaptations (1.5) | Fall Even |
| | This course will study appropriate infant/toddler programs (birth – age 3) including an overview of typical and atypical development, quality routines, appropriate environments, materials, and activities in the areas of cognition, language development, physical motor, social-emotional, aesthetics, and adaptive behavior. The importance of working with families, teaching through play, and using developmentally appropriate assessments to inform instruction will be emphasized. This course will also study current legislation that affects services provided to families and young children, including those with special needs. Prerequisite: Education 101. | |
| 175 | Foundations of Literacy (1.5) | Fall Even, Spring |
| | This course is an introduction to literacy instruction for prekindergarten thru elementary school. Different philosophical approaches to reading instruction, assessment, and research pertaining to speaking, listening, reading, writing, and viewing will be studied. Topics addressed will include the Science of Reading (including phonemic awareness, phonics, vocabulary, fluency, and comprehension) and the writing process. The standards of the International Reading Association will be introduced. Prerequisite: Education 101. | |

- 201 **Planning, Instruction, and Assessment in Elementary Schools (3)**..... Fall, Spring
This course introduces students to an understanding of instructional theory at the elementary school level. Focus is on the planning process and the integral role of instruction and assessment. Emphasis is on the development of a distinctively Christian approach to teaching and learning. Various perspectives on the instructional process are critically examined. Prerequisite: admission to the Teacher Preparation Program. Corequisite: Education 209.
- 202 **Planning, Instruction, and Assessment in Middle Schools (3)** Fall
This course introduces students to an understanding of instructional theory at the middle school level. Focus is on the planning process and the integral role of instruction and assessment. Emphasis is on the development of a distinctively Christian approach to teaching and learning. Various perspectives on the instructional process are critically examined. Prerequisite: admission to the Teacher Preparation Program. Corequisite: Education 209.
- 203 **Planning, Instruction, and Assessment in Secondary Schools (3)**.....Spring
This course introduces students to an understanding of instructional theory at the high school level. Focus is on the planning process and the integral role of instruction and assessment. Emphasis is on the development of a distinctively Christian approach to teaching and learning. Various perspectives on the instructional process are critically examined. Prerequisite: admission to the Teacher Preparation Program. Corequisite: Education 209.
- 204 **Paraeducator Field Experience (1.5)**..... Fall, Spring
A 45 hour supervised field-based internship in prekindergarten through grade twelve classrooms (placement determined by the certification option selected). This course is required for all paraeducator certification options. Prerequisite: Education 101.
- 209 **Service Learning-Tutoring (.5)** Fall, Spring
A 15-hour field-based experience to be taken concurrently with Education 201/202/203 in which candidates tutor assigned K-12 students.
- 210 **Assessment and Diagnosis in Remedial and Special Education (3)**..... Fall
Introductory course in the use of assessment techniques in special and remedial education. Various formal and informal assessment techniques are examined and applied to the development of educational programs that meet the needs of the exceptional student. Prerequisite: Education 201 or 202.
- 220 **Teaching the Co-Curricular Areas in Pre-K through Middle School (3)**..... Fall, Spring Odd
Provides background on methods and materials necessary for teaching physical education, health, wellness, visual arts, and performing arts in preschool, elementary, and middle school classrooms. Prerequisite: Education 201 or 202.
- 239 **Service Learning Field Experience (2)** Fall
A field experience, designed to be taken in conjunction with Education 335/336/337 during the student's senior year. Students assist in classrooms for a total of 60 hours. Experiences gained in the field are addressed in the concurrent education courses. Prerequisite: admission to the Teacher Preparation Program; or permission of instructor.
- 252 **Introduction to Behavior Management (3)**.....Fall
An introduction to understanding and working with behavior problems commonly found in children and adolescents. Students will become familiar with the identification and assessment of problem behaviors, planning classroom interventions, monitoring progress, choosing corrective strategies, and supporting interventions beyond the classroom. This course has implications for both the regular and special education teacher. Prerequisite: Education 201 or 202 or 203.
- 253 **Introduction to the Education of Children and Youth with Mild Disabilities (4)** Fall
A survey course dealing with the provision of educational services to students with mild disabilities, focusing on the history of special education, legal issues related to the field of special education, and an in-depth study of the characteristics of learners with mild to moderate disabilities. Prerequisite: Education 201 or 202 or 203.
- 260 **Teaching Bible in Pre-K through Middle School (1.5)**Fall Odd
Designed to discuss the role of Bible teaching in the Christian school, to examine curriculum materials, to develop pedagogical skills for teaching Bible, and to involve students in the designing of their own appropriate curriculum materials. Prerequisite: Education 201 or 202.
- 261 **Teaching the Bible (3)**Fall Even
This course explores the Reformational approach to teaching the Bible. Its primary goal is to equip lay and professional ministry practitioners and teachers with the skill of preparing and presenting biblical content to diverse audiences. Interpretive attention will be given to the text of Scripture, the situation of the learner, the process of preparation, the art of presentation. The course will cover theological and pedagogical foundations as well as the practical content of teaching Bible. This course is relevant for those teaching in a local church context as well as for those developing curriculum to teach the Bible in a high school classroom setting. [Cross-listed: Theology 254]
- 262 **Educational Theatre in the Classroom and Beyond (3)**Fall Odd
An introduction to informal dramatics for the classroom, youth theatre programs, and other applications in fields such as youth ministry,

social work, and psychology. Students interested in elementary, middle or high school teaching are encouraged to enroll. Emphasis is on dramatic activity requiring minimal equipment and facilities. Field experience required in area schools, churches, or after-school programs. Prerequisite: admission to the Teacher Preparation Program; or permission of instructor. [Cross-listed: Theatre Arts 262]

- 265 **Content Area Literacy (1.5)**Fall
The emphasis of this course is on using instructional strategies in the various content subjects to developing reading, writing, and studying skills to benefit all learners in today's diverse society. As children progress from elementary to middle and high school levels, much of their learning depends on how well they are able to read in the various subject areas. Responsibilities of the Christian educator in helping students develop their potential in reading in content areas will be addressed. Prerequisite: Education 201 or 202 or 203.
- 270 **Comparative and International Education (3)**Occasional
This course in comparative and international education helps pre-service teachers to develop an awareness of the strengths, challenges, and debates impacting education in different locations. An increased knowledge of the culture and education systems explored provide students with greater insights into their own educational systems and will allow them to recognize how a global understanding of education has important implications for what happens within their own context. Corequisite: SPICE 271.
- 271 **Special Education Practicum I (2-2.5)**..... Fall
A supervised field experience in the fall semester that allows the student to aid/observe in a special education classroom. The practicum is provided in a setting appropriate for the endorsement sought. Graded on a pass/no-record basis. Prerequisite: Education 201 or 202 or 203. Corequisite: Education 253.
- 272 **Special Education Practicum II (2)**Spring
A supervised field experience in the spring semester that allows the student to aid/observe in a special education classroom. The practicum is provided in a setting appropriate for the endorsement sought. Graded on a pass/no-record basis. Prerequisite: Education 201 or 202 or 203. Corequisite: Education 315.
- 281- **Service-Learning (1-3)** Fall, Spring, Summer 283
See page 120, Individual Studies
- 300 **History and Philosophy of Education (3)** Fall, Spring
This course examines how our societal perspectives and personal core beliefs affect the ways we “do school,” see students, plan teaching and learning, and make curriculum. Students will draw on a variety of resources – those from the tradition of Reformed, Christian education, some more broadly Christian, and those from outside faith-based education thought, to construct a statement describing their own educational philosophy. While this course meets a requirement in the Teacher Preparation Program, it does not assume a background in teacher preparation. Students from outside teacher preparation are welcome. Prerequisite for teacher preparation students: Education 201 or 202 or 203; Prerequisite for all students: CORE 200. [Cross-listed: CORE 310]
- 314 **Diagnosis and Remediation of Language/Reading Difficulties (3)**Spring
A study of the causes of reading difficulties in the preschool, elementary, middle-level, and secondary school, their diagnosis and correction in both classroom and remedial setting. Prerequisites: Education 175; Education 201 or 202; or permission of instructor.
- 315 **Instructional Methods and Strategies for the Education of Students with Mild Disabilities—Preschool, Elementary, and Middle School (4)**Spring
Deals with the instruction of students with mild disabilities such as learning disabilities, mild behavior disorders, and cognitive disabilities. Focus is on strategies directed toward the successful integration of students with mild disabilities into the regular elementary or middle level classroom. Includes embedded practicum experience. Prerequisite: Education 201 or 202 or 203; Education 210, 253.
- 317 **Transitional Collaboration (1)**Spring
Acquaints students with sources of services, organizations, and networks that provide transitional, career, and vocational supports for students with disabilities at all levels of development with particular focus on the needs of students transitioning from elementary to middle school, middle school to high school, and high school to post high school experiences. Prerequisite: Education 201 or 202 or 203; Education 210, 253.
- 320 **Phonics (1.5)**Spring
The content of this course focuses on the knowledge and instruction of phonics and word identification strategies commonly used by reading professionals, early childhood professionals, and those teaching English as a second language. Planning, instructing, and assessing using strategies that reflect best practices in early literacy instruction will be a central focus. Prerequisite: Education 201 or 202 or 203; or permission of instructor.
- 321 **Early Childhood Literacy (1.5)**Spring
This course is designed to cover the stages involved in the development of literacy in children up to the age of eight. Teaching methods and materials will be considered. The ability to communicate is a wonderful gift from God. It is amazing to work with and teach young children as they develop this gift. Prerequisite: Education 201 or 202 or 203; or permission of instructor.

- 322 **Introduction to Early Childhood (4)**Fall Odd
Designed to provide an overview of the field of early childhood education. Included are the following topics: growth and development of children from ages birth to eight; current trends in early childhood education; age appropriate lesson planning; what constitutes a supportive environment for young children; and the development of a professional Christian attitude towards children. Includes a 20-hour practicum in a child development center for children ages 0-5. Prerequisite: Education 201.
- 326 **Organization and Administration of Early Childhood Programs (3)**.....Fall Even
This course focuses on the administrative aspects of running a preschool. Topics include legal and licensing issues, as well as the development of a facility that is safe and organized in a way that promotes child development. Issues related to assessing program quality in terms of curriculum and personnel and ways to foster positive child-family-school relationships will be addressed. Prerequisite: Education 201.
- 331 **Teaching Social Studies in Pre-K through Middle School (3)**Spring
An introduction to a basic framework for social studies teaching with focus on methodologies, lesson and unit planning, learning resources, classroom organization, and new-tech media. Includes practical application activities for each major topic. Prerequisite: Education 201 or 202.
- 332 **Teaching Mathematics in Pre-K through Middle School (3)**..... Fall
Examines the principles of teaching mathematics including materials, pedagogy, lesson design, goals, and evaluation. Particular focus is placed on application of the Iowa Core Characteristics of Effective Instruction and the Iowa and National Core standards for mathematical practice and content as well as standards from the National Council of Teachers of Mathematics (NCTM). Prerequisite: Education 201 or 202; Mathematics 108. Corequisite: Education 239 or 369.
- 333 **Teaching Literacy in Pre-K through Middle School (3)** Fall
Designed to cover basic principles involved in the teaching of language arts. Special attention will be given to reading and writing. Handwriting, spelling, grammar, listening, speaking, and viewing will also be addressed. Various approaches and materials will be studied. Prerequisite: Education 175; Education 201 or 202 or 203. Corequisite: Education 239 or 369.
- 334 **Teaching Science in Pre-K through Middle School (3)**Spring
A basic course in the principles and techniques of teaching natural sciences. The primary focus is on the development of materials for use in the elementary and middle-level science classroom. Prerequisite: Education 201 or 202.
- 335 **Applied Educational Psychology for Elementary Teachers (3)**..... Fall
Examines the unique emotional, physical, intellectual, social and spiritual development of elementary students. Emphasis on developing a biblical view of the student through developmentally appropriate differentiation. Significant focus on the development of positive learning environments utilizing appropriate motivation and classroom management strategies. Prerequisite: Education 201 or 202.
- 336 **Applied Educational Psychology for Middle School Teachers (3)**..... Fall
Examines the unique emotional, physical, intellectual, social and spiritual development of early to mid-adolescence. Emphasis on developing a biblical view of the student through developmentally appropriate differentiation. Significant focus on the development of positive learning environments utilizing appropriate motivation and classroom management strategies. Prerequisite: Education 201 or 202 or 203.
- 337 **Applied Education Psychology for Secondary Teachers (3)** Fall
Examines the unique emotional, physical, intellectual, social and spiritual development of early to mid-adolescence. Emphasis on developing a biblical view of the student through developmentally appropriate differentiation. Significant focus on the development of positive learning environments utilizing appropriate motivation and classroom management strategies. Prerequisite: Education 202 or 203.
- 349 **Supervised Practicum in Teaching English as a Second Language (1.5)**.....Fall Even
A 45 hour field-based experience. This course provides pre-service teachers who are seeking to complete the Iowa Teaching English as a Second Language (ESL) endorsement an opportunity to gain valuable experience in K-12 ESL classrooms. Students will complete a designated number of hours in a supervised practicum. They will identify learning needs of K-12 students and design and evaluate strategies appropriate for English language learners. Prerequisite: Education 201 or 202 or 203. Corequisite: Education 355.
- 350 **Methods of Teaching Art in K-12 Schools (3)**Fall Even
Methods and techniques of organizing and motivating art on the secondary school level. Media explored depends on the needs and interests of the class. Prerequisite: Education 201 or 202 or 203.
- 351 **Methods of Teaching Sciences in High Schools and Middle Schools (3)**Fall Odd
A review of recent trends in science teaching in middle and secondary schools. Use of audio-visual materials pertinent to the various sciences, methods of evaluation, laboratory techniques, and textbook evaluations are included. Students give several class presentations and observe actual teaching situations. Prerequisite: Education 202 or 203.
- 352 **Methods of Teaching Agriculture in Middle and High Schools (3)**Occasional
Students will examine recent trends in agriculture teaching in secondary schools. Use of audio-visual materials, methods of evaluation,

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laboratory techniques, and textbook evaluations are included. The course will emphasize the development of a distinctively Christian approach to teaching agriculture. Students participate in an extensive, 40-clock hour, practicum experience in a local agriculture classroom, give several presentations, and observe actual teaching situations. Prerequisite: Education 202 or 203.

- 353 **Methods of Teaching STEM in K-12 Schools (2)**.....Spring Odd
This course explores the integrated nature of learning with an interdisciplinary curriculum approach in the areas of science, technology, engineering and math. Emphasis is on the unique curriculum planning, teaching methods, and career preparation opportunities in teaching integrated STEM programs. Field-based applications take place in local K-12 schools and/or in Dordt University lab-based courses. Prerequisite: Education 201 or 202 or 203.
- 354 **Methods of Teaching English and Language Arts in High Schools and Middle Schools (3)** Fall Even
Discussion of a Christian approach to the teaching of English in middle and secondary schools. Methods and approaches to teaching literature, reading, language, and composition, as well as micro-teaching in these areas. Attention is given to lesson, unit, course, and curriculum planning and to the use of audio visual materials. Prerequisite: Education 202 or 203.
- 355 **Methods of Teaching a Second Language (3 or 4)**..... Fall Even
Presentation of various methods for teaching a second language. Theories of second language acquisition will be examined. Students will learn strategies for teaching oral language, vocabulary, reading, and writing to language learners. Planning of standards-based language instruction that develops the four language skills and takes into account differing learning styles, interests, and varying levels of language proficiency will be emphasized. Students may choose one endorsement area (teaching foreign language OR teaching ESL/EFL) for three credits or do both endorsement areas for four credits. Prerequisite: Education 202 or 203.
- 356 **Methods of Teaching History and Social Studies in High Schools and Middle Schools (3)**..... Fall Even
Discussion of a Christian approach to the teaching of history and social studies in middle and secondary schools. Emphasis is on current methods and consideration of practical suggestions in classroom procedure. Prerequisite: Education 202 or 203.
- 357 **Methods of Teaching Mathematics in High Schools and Middle Schools (3)** Fall Odd
Methods of effective teaching of mathematics in middle and secondary schools. Prospective teachers attain understanding of the basic mathematics taught at the secondary level. Prerequisite: Education 202 or 203.
- 358 **Methods of Teaching Speech, Communication, and Theatre Arts in High Schools and Middle Schools (1)** Arranged
This course provides pre-service teachers who are seeking to complete the Iowa English/Language Arts–All endorsement an opportunity to gain valuable experience in high school/middle school speech and/or theatre arts classrooms. Students will complete a minimum of 20 clock hours in a supervised practicum. They will identify learning needs of secondary level students and design and evaluate strategies appropriate for the speech/theatre arts setting. Graded on a pass/fail basis. Prerequisite: Education 202 or 203.
- 359 **Methods of Teaching Business in High Schools and Middle Schools (3)**..... Fall Even
Examination of the role of business education in the curriculum and current concerns in business education. Study of methods and materials for courses in business education at the secondary and higher education levels. Prerequisite: Education 202 or 203.
- 360 **Methods of Teaching Physical Education and Health Education in K-12 Schools (3)** Fall Even
This course builds on the knowledge of the skills and methods of teaching physical education and health, providing opportunities to put that knowledge into practice. Topics include designing and organizing instruction to provide a high quality learning experience for K-12 students, developing a personal philosophy of physical and health education in light of a Christian perspective of teaching, developing confidence in the ability to plan and teach physical and health education. Prerequisite: Education 201 or 202 or 203
- 363 **Methods of Teaching Industrial Technology in High Schools and Middle Schools (2)**..... Spring
This course explores the integrated nature of learning with an interdisciplinary curriculum (science, technology, engineering and mathematics) approach to industrial technology. Emphasis is on the unique curriculum planning, teaching methods, and career preparation opportunities in teaching industrial technology. Field-based applications take place in local K-12 schools and/or in Dordt University lab-based courses. Prerequisite: Education 202 or 203.
- 369 **PDS Internship (3)** Fall
A 240-hour practicum experience designed to develop your content expertise, pedagogical skillset, and teaching dispositions. You will have the opportunity to apply the teaching and learning strategies examined in the methods courses taken concurrently with Education 369. The course includes reflective observation and practice in P-12 classrooms. Participants will observe classroom instruction by qualified teachers as well as co-plan and co-teach lessons to gain the practical experience necessary to reflect, evaluate and improve upon their teaching effectiveness.
- 370 **Student Teaching Internship—Early Childhood (4-8)**..... Fall, Spring
The teaching internship in a pre-school setting is the capstone experience of the Teacher Preparation Program. Student interns co-teach, to the greatest extent possible, with qualified mentor teachers in local Professional Development Schools (PDS) or in other partner schools.

- 371 **Student Teaching Internship—Elementary (4-16)** Fall, Spring
The teaching internship in an elementary (grades K-6) setting is the capstone experience of the Teacher Preparation Program. Student interns co-teach, to the greatest extent possible, with qualified mentor teachers in local Professional Development Schools (PDS) or in other partner schools.
- 372 **Student Teaching Internship—Middle Level (4-8)** Fall, Spring
The teaching internship in a middle school (grades 5-8) setting is the capstone experience of the Teacher Preparation Program. Student interns co-teach, to the greatest extent possible, with qualified mentor teachers in local Professional Development Schools (PDS) or in other partner schools.
- 373 **Student Teaching Internship—Secondary (4-16)** Fall, Spring
The teaching internship in a secondary school (grades 5-12) setting is the capstone experience of the Teacher Preparation Program. Student interns co-teach, to the greatest extent possible, with qualified mentor teachers in local Professional Development Schools (PDS) or in other partner schools.
- 374 **Student Teaching Internship—Vertical (4-16)** Fall, Spring
The teaching internship in a P-12 school setting is the capstone experience of the Teacher Preparation Program. Student interns co-teach, to the greatest extent possible, with qualified mentor teachers in local Professional Development Schools (PDS) or in other partner schools.
- 375 **Student Teaching Internship—English as a Second Language (4-8)** Fall, Spring
The teaching internship in an ESL setting is the capstone experience of the Teacher Preparation Program. Student interns co-teach, to the greatest extent possible, with qualified mentor teachers in local Professional Development Schools (PDS) or in other partner schools.
- 376 **Student Teaching Internship—Reading (4-8)** Fall, Spring
The teaching internship in an elementary (grades K-6) setting is the capstone experience of the Teacher Preparation Program. Student interns co-teach, to the greatest extent possible, with qualified mentor teachers in local Professional Development Schools (PDS) or in other partner schools.
- 377 **Student Teaching Internship—Elementary Instructional Strategist (4-8)** Fall, Spring
The teaching internship in an elementary (grades K-8) inclusive classroom or in a classroom serving students with mild disabilities is the capstone experience of the Teacher Preparation Program. Student interns co-teach, to the greatest extent possible, with qualified mentor teachers in local Professional Development Schools (PDS) or in other partner schools.
- 378 **Student Teaching Internship—Secondary Instructional Strategist (4-8)** Fall, Spring
The teaching internship in a secondary (grades 5-12) inclusive classroom or in a classroom serving students with mild disabilities is the capstone experience of the Teacher Preparation Program. Student interns co-teach, to the greatest extent possible, with qualified mentor teachers in local Professional Development Schools (PDS) or in other partner schools.
- 379 **Student Teaching Internship—Multiple Endorsements (4-16)** Fall, Spring
The teaching internship is the capstone experience of the Teacher Preparation Program. Student interns co-teach, to the greatest extent possible, with qualified mentor teachers in local Professional Development Schools (PDS) or in other partner schools.
- 381 **Senior Seminar I (1)** Fall
Education 381 is scheduled in the fall semester of the professional year. Emphasis is on developing professional skills including communication with the home and colleagues, motivation techniques, effective classroom management, and understanding legal and ethical issues applicable to the teaching profession. Graded on a pass/fail basis.
- 382 **Senior Seminar II (1)** Spring
Education 382 is scheduled in the spring semester of the professional year and is taken concurrently with the teaching internship. Emphasis is on developing a coherent biblical philosophy of education, appropriate motivation techniques, effective classroom management, and understanding legal and ethical issues applicable to the teaching profession. Graded on a pass/fail basis.
- 391- **Individual Studies (1-3)** Fall, Spring, Summer
393 See page 120, Individual Studies

Engineering

The mission of the engineering department is based on an awareness of a calling that Christian engineers have as God's covenant people to bring every area of life under the lordship of Christ. Therefore, the Dordt University engineering program seeks to provide serviceable insight in the field of engineering from a distinctively Christian perspective; in a manner that demonstrates the unity of creation and rejects the classic polarizations between technical and humanities, vocational and liberal arts, or natural and spiritual; while demonstrating the highest possible quality of undergraduate teaching that we understand to be, most fundamentally, the enabling for Christian discipleship.

In harmony with the department's mission statement and guided by the four curricular coordinates of *The Educational Framework of Dordt University*, graduates of the Dordt University engineering program will...

1. ... be rooted in the Word of God that calls all of creation to serve and glorify its Creator, Redeemer, and Lord. As image-bearers of the risen Lord, called and empowered by the Spirit of Christ, they will strive to responsibly develop technology while critically assessing how current cultural trends impact the direction of engineering. (Religious Orientation)
2. engage in life-long learning out of love for the Creator and in humble and worshipful recognition of the diversity and coherence of the entire creation which proclaims His glory. Their care-filled attentiveness will delight in both detailed study and broad application of science, technology, engineering, and mathematics. (Creational Structure)
3. ... embrace God's call for humanity to flourish the creation via responsible unfolding of its technological potential, while simultaneously taking account of the historical distortions of sin and shortcomings of human understanding embedded in past, present, and future culture-making such as technicism, scientism, reductionism, dehumanization, and enslavement of technology to economics or efficiency. (Creational Development)
4. ... faithfully move from theory and engineering insight to committed action in grateful kingdom service to God and neighbor. They will be guided by a desire to act justly, love mercy, and walk humbly with our God. Knowing that they are engaged in Christ's work, they will not grow weary or lose heart, but with tenacity and perseverance, in prayer for the Spirit's guidance, wisely develop responsible technology that appropriately addresses contemporary needs while expressing the joy, playfulness, and imagination that reflects a Creator who is making all things new. (Contemporary Response)

The following curricular outcomes provide specific means of achieving the institutional and program educational objectives. Students will have...

0. Faithfulness and Responsibility. ...an ability to articulate and faithfully practice responsible engineering that grows out of Christ's all-encompassing work as Creator, Sustainer, and Redeemer.
1. Fundamentals. ...an ability to identify, formulate, critically evaluate, and solve complex engineering problems by applying principles of engineering, science, and mathematics faithful to the analytical, sensory, biotic, physical, kinematic, spatial, and numeric aspects of creation.
2. Design. ...an ability to holistically design systems, components, or processes that flow from a vision of responsible engineering, giving consideration to models of normative technology faithful to the fiduciary, ethical, juridic, aesthetic, economic, social, lingual, and cultural aspects of creation.
3. Communication. ...an ability to openly, honestly, and effectively communicate with a broad range of audiences using a variety of oral, written, and graphical forms.
4. Context. ...an ability to recognize how professional and ethical engineering grows out of our faithful response to the cultural mandate and therefore must be grounded in an understanding of contemporary issues within the broader context of historical, cultural, societal, global, economic, and environmental development.
5. Teamwork. ...an ability to function effectively on a team by serving alongside others to provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.
6. Experimental Development and Analysis. ...an ability to develop and conduct appropriate experiments, analyze and interpret data, and use holistic judgment to draw conclusions.
7. Lifelong Learning. ...an ability to humbly acquire and apply new knowledge, insights, and skills as faithful stewards of creation.

In addition to the standard admission requirements of the university, the following high school courses and preparatory indicators are recommended for students considering an engineering degree at Dordt University:

- Complete four units or more of college preparatory mathematics, one unit of chemistry, and one unit of physics. Preparation in computer programming/analysis is also helpful.
- Earn a combined SAT score (Math, Verbal) of 1100 or higher or a composite ACT score of 24 or higher. A minimum mathematics SAT score of 600 or ACT score of 25 is highly desirable. Students who have maintained a cumulative high school GPA of 3.4 or higher are more likely to successfully complete the Dordt University engineering program. The average composite ACT score of Dordt University engineering graduates is 28.

After completing three semesters in an engineering curriculum (with a minimum of one semester at Dordt University), students seeking the B.S.E. degree will apply to be officially accepted into the engineering program. To be accepted into the engineering program students must:

- Review the program mission, along with the curricular objectives and outcomes of the engineering program. Students will reaffirm their commitment to the program objectives and outcomes as they partner with faculty in the learning process.
- Declare a specific concentration in the engineering program and provide an updated program of study plan.
- Achieve a C- or better in each of Engineering 112, 114, 115, 116, 117, Chemistry 109 or 111, Mathematics 152, 153, 204, Physics 201, 202, along with an overall GPA of 2.5 or higher.

Every student in the engineering major will be assigned an engineering faculty member as his or her academic advisor.

The engineering program is accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>. To earn a Bachelor of Science in Engineering degree from this ABET accredited program, students must successfully complete the major requirements outlined below.

Engineering Major– Foundation (common to all emphases): Engineering 112, 114, 115, 116, 117, 202, 208, 220, 225, 295, 310, 379, 380, 381, 390; Chemistry 111; Computer Science 115; Mathematics 152, 153, 204; Physics 201, 202; Statistics 132.

Students must select one of the following concentrations:

- Biomedical:** Foundation; Engineering 209, 212, 302, 347, 348, 357; two courses from Biology 125, 325, 326, Chemistry 225, 261, 322; two courses from Engineering 204, 300, 303, 304, 314, 316, 319, 322, 323, 360, 362 and 365, 363; one course from Mathematics 201, 203, 209, Statistics 201.
- Chemical:** Foundation; Engineering 300, 302, 303, 347, 348, 354, 355, 362, 366; Chemistry 225; one 3- or 4-credit course from Chemistry 200 or above; Mathematics 201.
- Civil:** Foundation; 212, 302, 306, 317, 318, 319, 351, 352, 353; one course from Engineering 209, 314, Construction Management 101, 102, 207, 220, 240, 270, 280; Mathematics 201.
- Environmental:** Students interested in a civil engineering concentration with an interdisciplinary environmental emphasis may substitute Environmental Studies 251 and 252 for either Engineering 351 or 352; and Environmental Studies 201 or 202 for the Engineering/Construction Management elective.
- Computer:** Foundation; Engineering 204, 304, 322; Computer Science 205, 215, 315, 340; Mathematics 212; one course from Engineering 323, 362 and 365, 363, Computer Science 204.
- Electrical:** Foundation; Engineering 204, 304, 322, 323, 360, 362, 363, 365; Mathematics 201; Physics 203.
- Mechanical:** Foundation; Engineering 209, 212, 300, 302, 303, 316, 350, 362, 365 or 366; one course from Engineering 314, 317, 357, 360; Mathematics 201.
- Mechatronics:** Students interested in a mechanical engineering concentration with an interdisciplinary mechatronics emphasis may substitute three courses from Engineering 204, 304, 322, 323 for Engineering 300, 303, 350.

Students in the biomedical concentration are encouraged to consider adding a biomedical sciences minor. Students in the chemical concentration are encouraged to consider adding a chemistry minor. Students in the computer concentration are encouraged to consider adding a computer science minor. Students interested in engineering research or engineering graduate school are encouraged to consider adding an applied mathematics minor.

Engineering Science Major

The engineering science major shares the same mission as the engineering major but puts greater emphasis on basic science and allows more flexibility in course selection. The engineering science major has not been examined nor accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>. To earn a bachelor of arts degree in engineering science, students must successfully complete the major requirements outlined below.

- Engineering Science–** Foundation (common to all emphases): Engineering 112, 114, 115, 116, 117, 390; Chemistry 109 or 111; Mathematics 152, 153, 204; Physics 201, 202.

Students must select one of the following emphases:

- General:** Foundation; 18 credits of natural science, computer science, or business administration related courses not included in the foundation; 18 additional credits of engineering course electives not included in the foundation.
- Architecture:** Foundation; Art 201, 202, 240; three courses from Art 207, 208, 209, 210; Engineering 208, 209, 212, 295, 310; one course from Environmental Studies 151, 201, 202; minimum of nine credits from Construction Management 101, 102, 207, 220, 240, 270, 280; minimum of nine credits from Engineering 202, 302, 303, 317, 318, 319, 350, 351, 352.
- Construction Management:** Foundation; Business Administration 205; Communication 220 or 222; Construction Management 101, 102, 207, 220, 225, 240, 270, 280, 370; Engineering 208, 209, 212, 317, 318; three courses from Engineering 202, 220, 295, 300, 302, 310, 319, 350, 351, 352; Statistics 131 or 132.

To ensure a coherent course sequence, students must have all the courses in their proposed program of study approved by the engineering department before declaring a general engineering science major.

Engineering and Engineering Science majors may complete a secondary (grades 5-12) engineering teaching endorsement. This is an additional major so students should work with their advisors to plan their academic program completion timeline, which may require additional semesters. For descriptions of an EDUCATION major and engineering teaching endorsement, see pages 86-99, Teacher Preparation Program.

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- 112 **Introduction to Computer Aided Engineering and Design (1)**..... Fall
The design studio experience introduces concepts of graphical communication for engineers and develops basic 2-D and 3-D design skills with the use of a solid modeling software package. The course meets for one design studio per week. [Cross-listed: Manufacturing 112]
- 114 **Introduction to Engineering Design (2)**..... Fall
An engineering foundations course that introduces students to Christian discipleship as expressed in the field of engineering. Students are exposed to the concept of a biblically guided engineering design process. Students will explore engineering design economics (energy, material, time, and money) within the broader norms of engineering stewardship and holistic design. Basic engineering analysis tools and methods of engineering design will be practiced. Students are given the opportunity to learn about engineering by doing engineering as they participate in a project-based engineering analysis and design activities. The class will meet for one lecture period and one lab-studio or discussion session per week for the entire semester. Corequisite: Mathematics 152.
- 115 **Introduction to Engineering Statics and Structures (1)**Spring
An introduction to the engineering analysis and design of structures. Students will explore principles of statics and mechanics within the broader context of engineering analysis and design. The course meets for one studio session per week. Corequisite: Mathematics 152.
- 116 **Introduction to Engineering Analysis (3)**..... Fall
An introduction to engineering mathematics and problem solving, introducing foundational mathematics and computational tools for the solution of a variety of engineering problems. The course introduces a perspective on how the activities of both math and science can inform and constrain our ability to design normatively. The course meets for one lecture session and one studio session per week. Corequisite: Math 152.
- 117 **Introduction to Engineering Electronics (1)**.....Spring
An introduction to electrical engineering fundamentals relating to electrical energy and circuit analysis. Concepts in digital logic and digital electronics are also introduced. Students will explore principles of electronic systems within the broader context of engineering analysis and design. The course meets for one studio session per week. Corequisite: Mathematics 152.
- 170 **Engineering Programming (3)**.....Occasional
An introduction to computer programming. Basic notions of abstraction, elementary composition principles, the fundamental data structures, and object-oriented programming technique are introduced. Topics include variables, control structures, arrays, and input/output. This course is intended for students in the teacher preparation program pursuing an engineering endorsement. [Cross-listed: Computer Science 115]
- 202 **Elements of Materials Science (4)**Spring
Studies the relationship between structure and properties of various materials, including metals, ceramics, polymers, and semiconductors. Students will learn how atomic and molecular arrangements, as well as manufacturing processes, influence the mechanical, electrical, and thermal properties of a material. Introductory topics in metallurgy in this course include the examination of effects of processing (heat treatment and manufacturing) and service environment on microstructure and properties. Laboratory explorations in materials engineering introduce concepts in experimental design and data analysis. Prerequisites: Chemistry 109 or 111; Physics 201.
- 204 **Introduction to Microprocessors and Digital Circuits (4)**Fall Odd
Digital circuits are covered, from simple logic gates through elementary microprocessor architecture. The course begins with elementary logic for binary systems, Boolean algebra, binary integer number formats and arithmetic, and combinational design. Intermediate topics include synchronous state machine design and register level concepts. The course concludes with topics in microprocessor architecture that include elementary assembly language and interfacing. Laboratory provides hands-on experience in logic design and microprocessor interfacing and includes two formal design projects. This course serves both computer science and engineering students. Prerequisite: Engineering 117 or Physics 202 or Physics 216.
- 208 **Statics (2)**..... Fall
A mechanics course that examines the effects of forces and moments applied to rigid and deformable bodies in equilibrium. Students will analyze concentrated and distributed force systems applied to static particles, rigid bodies, trusses, frames, and machines. Prerequisites: Engineering 115; Physics 201.
- 209 **Dynamics (2)** Fall
A mechanics course that examines the kinematics and kinetic analysis of particle systems and rigid bodies. Prerequisite: Engineering 208.
- 212 **Mechanics of Materials (4)**Spring
A solid mechanics course that examines the stresses, strains, and deformations that develop when various loads (tension, compression, torsion, bending, or any combination of these loads) are applied to deformable bodies. Elements of structural design are introduced using safety factors and failure criteria for ductile materials. The mechanics design laboratory provides an introduction to experimental methods, hands-on experience applying and using strain gages and investigating beam loading, and an introduction to finite-element analysis (FEA) software. Prerequisite: Engineering 208.

- 220 **Linear Circuits and Electronics (4)** Fall
Assumes a prerequisite knowledge of DC electrical circuits, including the definitions of electrical quantities, circuit elements (sources, resistors, capacitors, inductors), understanding of Kirchhoff's laws and basic concepts in AC circuits such as frequency and phase. Topics in this course include: general linear circuit analysis including Norton's and Thevenin's theorems; superposition; nodal and loop analysis; natural and forced responses in RLC circuits; and sinusoidal steady state analysis. The course also gives introductions to operational amplifier circuits, single stage BJT transistor circuits, and steady-state balanced 3-phase power calculations. The lab includes a formal design project. Prerequisite: Engineering 117 or Physics 202 or Physics 216. Corequisite: Mathematics 204. [Cross-listed: Physics 206]
- 225 **Mechatronics and Instrumentation (3)** Spring
An introduction to engineering mechatronics with applications of engineering measurement, data acquisition, instrumentation, sensors, actuators, digital and analog signal fundamentals, automatic control, and other electro-mechanical system interfacing. Prerequisite: Engineering 220; Computer Science 115; or permission of instructor.
- 281- **Service-Learning (1-3)** Fall, Spring, Summer
283 See page 120, Individual Studies
- 295 **Introduction to Thermal-Fluids (4)** Spring
An introduction to the principles of thermodynamics, fluid mechanics, and heat transfer principles, including energy, work, heat, properties of pure substances, the first and second laws, and other thermal-fluid relations. Prerequisite: Physics 202.
- 300 **Thermal-Chemical Systems (4)** Fall
Engineering thermodynamics applied to chemical, energy, and environmental systems. Students will study cycles and efficiencies, mixtures and solutions, chemical reactions, chemical and phase equilibrium, combustion thermodynamics, availability analysis, gas mixtures and psychrometrics, and thermal-fluid systems analysis. Applications to chemical reactors, combustion systems, emissions measurement, efficiency assessment, and indoor/outdoor air quality will be explored. The course meets for three lecture periods and one lab-studio session per week. Prerequisite: Engineering 295.
- 302 **Fluid Mechanics (3)** Fall
A comprehensive, introductory course in fluid mechanics covering: hydrostatics; control volume approach to the continuity, momentum, and energy equations; dimensional analysis, similitude, and modeling; introductory boundary layer theory; fluid drag and lift; flow through conduits, pumps and compressors; and hydraulics and open channel flow. All students participate in team design projects involving design of water supply, irrigation, air handling system, or other complex fluid dynamics system. Prerequisite: Engineering 295. Corequisite: Mathematics 204.
- 303 **Heat Transfer (4)** Spring
Studies of the three modes of heat transfer (conduction, convection, and radiation) with application to heat exchangers. Computer methods are used extensively for heat transfer design and analysis. A formal heat exchanger design project is included in this course. The thermofluids and heat transfer laboratory will emphasize experimental design, technical communication skills, and report writing. Prerequisite: Engineering 295; or permission of instructor.
- 304 **Embedded Microcontroller Systems (4)** Spring Even
A course on the design of microcontroller-based systems and the associated software and hardware. Software issues such as modular design, interrupt-driven I/O, and design for reliability are covered. Hardware issues such as serial and parallel interfacing, bus structures, grounding and shielding, and D/A and A/D conversions are also studied. Lab exercises provide design experience using a particular microcontroller or a soft processor foundation in an FPGA. Prerequisites: Engineering 204, 220; Computer Science 115; or permission of instructor.
- 306 **Hydrology and Hydraulics (2)** Spring
An introduction to hydrology and hydraulics principles, including both classwork and hands-on laboratory work. Topics include basic hydrology (infiltration, runoff, detention, etc.) and basic hydraulics, pumping systems, water distribution systems, reservoirs, groundwater, and storm sewer collection. Prerequisite: Engineering 302.
- 310 **History of Science and Technology (3)** Spring
Enables the student to examine from a Reformed, biblical perspective the narrative of scientific unfolding and technological development as two human activities that are manifest in all cultures. Emphasis is on the major paradigms and events that have shaped the development of science and technology in the West and most recently in North America. The course focuses on the historical activity of engineers and artisans, while investigating the interrelationship between scientific thought and technological development. Events and ideas such as the philosophical origins of Western science, the Copernican revolution, Enlightenment rationalism, the industrial revolutions, 20th century positivism, the Einsteinian revolution, and the modern systemization ethic are discussed. Prerequisites: CORE 140, 200. Corequisite: CORE 145. [Cross-listed: CORE 312]
- 314 **Computational Mechanics (3)** Spring
A senior-level computational modeling and design course focused on the application of finite element analysis (FEA) and other computer simulation tools for stress, deflection, thermal, kinematic, or dynamic modeling. Prerequisite: Engineering 212; or permission of instructor.

- 316 **Machine Design (3)**Spring
A senior-level design course in the analysis and design of machine elements. The first half of the course covers materials processing; stress-strain analysis; as well as failure criteria for static and dynamic loading. The second half of the course applies these fundamentals to the specification and design of several machine elements such as, shafts, bearings, gears, springs, fasteners, clutches, brakes, and slider cranks, four-bar linkages, cams. Students will complete an open-ended mechanical design project. Familiarity with computer software capable of solving iterative design problems is required. Prerequisite: Engineering 212.
- 317 **Structural Analysis (3)** Fall
A study of the analysis of trusses, beams, and framed structures. Students will learn how to determine loads on structures, including dead loads, live loads, and environmental loads. Shear, moment, and deflected shape diagrams will be considered. Deformation calculations, approximate analysis methods, flexibility methods, and stiffness methods for the analysis of indeterminate beams and frames will be considered. Influence lines for determinate and indeterminate beams will be introduced. Prerequisite: Engineering 212.
- 318 **Soil Mechanics and Foundation Design (4)** Fall
A study of the engineering principles relating to soil properties and foundation design. The material properties of soil including structure, index properties, permeability, compressibility, and consolidation will be explored. Methods of soil testing, identification, and remediation will be covered. Principles of settlement and stresses in soils will be considered. Slope stability, retaining walls, and bearing capacity of shallow foundations will be introduced. The soils lab will provide hands-on opportunities to determine water content, perform sieve analyses, and test liquid, plastic, and shrinkage limits. Soil classification, compaction, compression, and consolidation testing will be explored. Prerequisite: Engineering 212 or Construction Management 214. [Cross-listed: Construction Management 318]
- 319 **Environmental Engineering (3)**Spring
An introduction to water supply and wastewater treatment, solid waste management, hazardous waste disposal, pollution control equipment, and other topics relating to the engineer's role for ensuring clean air and providing clean water to communities. Methods and equipment for monitoring and testing air and water quality will be examined. Prerequisites: Chemistry 109 or 111.
- 322 **Electronics I (4)**Fall Even
A study of the flow of electricity in, and application of, semiconductor devices. Topics include basic signals and amplifier characteristics, operational amplifiers models and applications, diodes and applications, field effect transistors, bipolar junction transistors, and methods of amplification with single-transistor circuits. The laboratory includes a number of short design problems. Prerequisite: Engineering 220.
- 323 **Electronics II (4)**Spring Odd
A continuation of Engineering 322. Topics include biasing strategies for discrete and integrated circuit designs, current mirrors, differential and multistage amplifiers, frequency response, feedback, and stability. The laboratory includes construction of a kit, which introduces students to power output stages, tuned amplifiers, and demodulator circuits. The laboratory also includes a short design problem. Prerequisite: Engineering 322.
- 326 **Electromagnetic Theory (4)**Spring Even
Review of vector calculus; divergence, curl, Gauss' and Stoke's theorems; electro- and magneto-statics; polarization; boundary conditions; Laplace and Poisson equations; magnetic vector potential; energy; Maxwell's equations for time varying fields; wave propagation; and Poynting's theorem. Prerequisites: Physics 203; Mathematics 201, 204. [Cross-listed: Physics 326]
- 341- **Special Topics in Engineering (3)**Occasional
343 Elective courses designed to treat particular topics in more detail than would be done in any of the above courses. Topics will depend on the mutual interest of students and staff.
- 344 **Fluidization Engineering (1)**Occasional
A special topics course for chemical and energy systems engineers, exploring the theory and applications of fluidized bed reaction and conversion systems. The course will be offered in an independent study format with integral laboratory research and design projects.
- 345 **Biorenewable Systems Engineering (1)**Occasional
A special topics course for chemical and energy systems engineers, exploring the theory and applications of biorenewable technology, products, and processes. The course will be offered in an independent study format with integral laboratory research and design projects.
- 347 **Engineering Research Methods (2)**Spring
A research topics course for engineers in all disciplines, exploring the techniques and knowledge necessary to design and conduct experiments in their particular engineering field. It will include the nature and scope of a research project, how to conduct literature searches, and how to design methods and protocols for problem solving. The course will be offered in a weekly seminar format with regular progress reports, an integral literature research, and experimental design projects. Prerequisite: junior or senior standing; or permission of instructor.
- 348 **Engineering Research (1-3)** Fall
An engineering research course for senior-level engineering students that focuses on developing problem solving and critical thinking skills in engineering research projects related to their discipline. In collaboration with a faculty mentor(s), students will choose and conduct a

research project. Offered in an independent study format. Project results will be presented in a departmental seminar. Prerequisite: Engineering 347.

- 350 **Sustainable Energy Systems Design (3)**..... Fall
A senior-level design course that focuses on designing energy systems for conservation, sustainability, and efficiency. Methods of auditing energy utilization and design principles for energy conservation are addressed as are solar and renewable energy technologies for meeting residential, commercial, and industrial energy needs. A variety of computer tools will be used for system analysis. A design studio component may incorporate tours, community service projects, and design projects relating to energy utilization and conservation. Prerequisites: Engineering 300, 302.
- 351 **Reinforced Concrete Design (3)**Fall Odd
Analysis and design of reinforced concrete beams, columns, one-way slabs, and frames. The design of members for axial load, flexure, shear, deflections, bond, and anchorage will be considered. Design will be based primarily on ACI strength design methods. Pre or corequisite: Engineering 317.
- 352 **Structural Steel Design (3)** Fall Even
A study of design and behavior of steel members and structures. The design of steel beams, columns, tension members, frames, trusses, and simple connections will be considered. Design will be based primarily on AISC specifications related to the load and resistance factor design method. Allowable stress design will be introduced. Corequisite: Engineering 317.
- 353 **Introduction to Transportation Engineering (3)** Spring Even
An introduction to transportation engineering and design. Students will study geometric design of highways, pavement design, traffic flow theory, highway capacity, traffic control devices, and transportation planning. A primary aim of the course is to introduce students to fundamental principles and approaches in transportation engineering. Secondary objectives of the study include gaining a better understanding of how to be an active steward in God's creation, how to care for the safety of fellow citizens, and learning the basic concepts behind transportation and why it is so important in our culture today. Prerequisite: junior or senior standing.
- 354 **Separation Processes and Mass Transfer (3)** Spring Even
A study of equilibrium and non-equilibrium mass transport in chemical engineering applications. Methods for analyzing continuous contacting and multistage separation processes are explored. Mass transfer principles are applied to the design of distillation, gas absorption, extraction, evaporation, and humidification systems. Prerequisites: Chemistry 109 or 111; Engineering 300, 302; Mathematics 204.
- 355 **Chemical Kinetics and Reactor Design (3)** Spring Odd
An introduction to chemical kinetics and the design of chemical reactors. Differential and integral analysis of homogeneous reaction and heterogeneous reactions using kinetic data are explored. Ideal reactor designs, non-isothermal reactor designs, and the design of catalyzed reactors are addressed. Prerequisites: Chemistry 109 or 111; Engineering 300, 302; Mathematics 204.
- 357 **Biomechanics (3)**..... Spring Even
An introduction to applying the principles of mechanical engineering – primarily solid mechanics and dynamics – to living systems. The course will focus on the biomechanics of human movement, particularly the process of inverse dynamics during locomotion, and also on the mechanical properties of biological tissues. Open-ended project work will be a significant component of the course. No prior biological knowledge will be assumed. Prerequisites: Engineering 209, 212; or permission of instructor.
- 360 **Introduction to Power System Analysis (3)**..... Fall Odd
An introduction to the design, planning, and operation of electric power utilities. Includes principles of economic dispatch and politics that impact design and operating strategies. Topics include power transmission lines, transformers, generators, system modeling, load flow analysis, faults, and system stability. Prerequisite: Engineering 220.
- 362 **Dynamic Systems and Process Control (3)**..... Fall
A study of the dynamics and automatic control of systems. Topics include dynamic system modeling, feedback, steady-state operation, transient response, root loci, state-space representation, frequency response, stability criteria, and compensation. A variety of system types are modeled and analyzed, including mechanical, electrical, hydraulic, pneumatic, thermal, and chemical systems. Structured modeling approaches using Laplace transform methods and state equations are explored. Prerequisites: Engineering 220; Mathematics 204; Physics 202. Corequisite: Engineering 365 or 366.
- 363 **Introduction to Communication Systems (3)**..... Fall Even
A study of analog and digital communication systems performance and theory with applications in radio, satellite, telephone, computer networking, and radar systems. Topics include linear modulation (AM, SSB, etc.), exponential modulation (FM and PM), sampling theory, the discrete-time and discrete-frequency domains, and basic digital modulation methods such as *m*-ary PSK, DPSK, OFDM, etc. The topic of noise is considered at the most elementary level sufficient to distinguish the performance of various modulation methods in the presence of noise. Prerequisite: Engineering 220.

- 365 **Control Systems Lab (1)** Fall
A laboratory course in the dynamic modeling and automatic control of mechanical and electrical systems. Corequisite: Engineering 362.
- 366 **Process Control Lab (1)** Fall
A laboratory course in the dynamic modeling and automatic control of thermo-chemical processes. Corequisite: Engineering 362.
- 371- **Engineering Internship (1-6)** Fall, Spring, Summer
376 An off-campus experience that is intended to provide the engineering major with an opportunity to apply knowledge, principles, and skills gained in the classroom in an engineering workplace environment. Written and oral summary reports by participants bring reflection on the technical experience into subsequent classes. Graded on a pass/fail basis. Prerequisite: completion of six engineering courses or junior standing in the engineering program.
- 379 **Senior Design I (2)** Fall
The first of two project courses providing students with the opportunity to use, in an integrated manner, the knowledge and skills that have been acquired to this point in their education. This design studio course is devoted entirely to the research, planning, analysis, and report writing required in the first phase of the senior design project. Students work in project teams of two to four on a project of their mutual interest. The class meets for one lecture period and at least one team-mentor session per week. Prerequisites: senior standing; engineering program admission; minimum cumulative engineering GPA and overall GPA of 2.5.
- 380 **Senior Design II (2)** Spring
The second course devoted to senior design project activities. This lab studio course requires students to complete the design, experimentation, analysis, and communication components of their project. Work on the project, while culminating in this course, starts in Engineering 379 the previous semester. Teams confer weekly with members of the engineering department staff. Prerequisite: Engineering 379.
- 381 **Engineering Economics (2)** Spring
A course on the fundamentals of engineering economics and system cost analysis. An introduction to engineering economic topics such as, cost estimating, economic decision-making, time-value analysis, depreciation, taxes, cash flow, cost-benefit, and risk assessment will be addressed in the context of stewardship principles of engineering design. Prerequisite: Engineering 379.
- 390 **Technology and Society (3)** Spring
An examination and critique of the relationship of technology to other areas of Western society. During the first half of the course students examine a Christian philosophy of technology and application is made to such problems as the role of the computer, technocracy, appropriate technology, and the historical two-cultures dualism. During its second half, the course focuses on the question of engineering ethics, with particular emphasis on such questions as safety and risk, professional responsibility and authority, whistle blowing, normative socio-economic structures, and morality in career choice. This course requires the student to write and orally present a significant thesis paper. Prerequisites: CORE 200; junior or senior standing. [Cross-listed: Computer Science 390, CORE 267]
- 391- **Individual Studies (1-3)** Fall, Spring, Summer
393 See page 120, Individual Studies

English

General Major– Foundation (common to both emphases): English 201, 202, 210, 312, 314, 316, 323.

Students must select one of the following emphases:

Literature: Foundation; English 207; English 335 or 336; one course from English 220, 301, 302, 303, 304, 307, 308; five additional courses from COURSES FOR MAJORS including Theatre Arts 365 or 366.

Writing: Foundation; English 220; English 335 or 336; one course from English 241, 242, Communication 244, 245; four courses from English 301, 302, 303, 304, 305, 307, 308, 310; one additional course from COURSES FOR MAJORS.

General Minors–

English: English 210; one course from English 220, 301, 302, 303, 304, 305, 307, 308; four additional courses from COURSES FOR MAJORS.

Writing: English 210, 220; one course from English 201, 202, 203, 205; four courses from English 301, 302, 303, 304, 305, 307, 308, 310, and 335 or 336.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 86-99, Teacher Preparation Program.

- 100 **Basic Writing for College Students (4)**..... Fall
An intensive introduction to and review of the skills college-level writing requires, focusing on the larger issues of presenting, developing, and supporting ideas, on issues of correctness at the sentence level (grammar, usage, punctuation, and mechanics), on developing the element of voice, as well as on learning various essay styles for effective academic writing. Intended for students with special needs in written composition (i.e., for those with an ACT score below 18 on the English component of the test). Completing this course, with a grade of C or better, meets the Core Program writing requirement.
- 105 **Workplace Writing (3)**..... Fall, Spring
Workplace Writing focuses on the processes and strategies for creating written communication within a workplace setting. Examines audience awareness, stylistic conventions, and document design. Emphasizes the preparation of a variety of written documents, such as resumes, internal and external correspondence, descriptions, proposals, instructions, summaries, and reports. Credit will not be given for English 105 if English 100 or CORE 120 have been completed.
- 105L **Workplace Writing Lab (1)**..... Fall, Spring
An additional one credit tutorial session for students with a score below 18 on the English portion of the ACT. Corequisite: English 105.

COURSES FOR MAJORS

- 200 **Reading for Life (1.5)**..... Occasional
This shorter course focuses on a particular topic that will affect students' lives throughout adulthood. Typically, students will read a book before class and discuss it in its entirety. They will learn to read thoroughly, critically, and charitably, and they will practice dialoguing with others about books and reading. Instructors will select topics that center around a genre, author, time period, or key cultural idea; past topics have included J.R.R. Tolkien; creative memoirs; Philip K. Dick; and Victorian novels. English majors may take up to, but no more than, two Reading for Life courses for credit towards the English major. This course is appropriate for both majors and non-majors.
- 201 **American Literature I (3)**..... Fall Odd
This course surveys the literature of colonial North America and the early United States republic (1492-1860), including poems, novels, magazines, and newspapers. We will examine the influence of Calvinism, Catholicism, and the Enlightenment on American culture, and we will place American literature in a transatlantic and global context. Authors and texts include Edgar Allan Poe and other American Romantics, Benjamin Franklin, slave narratives, Puritan poetry, and Native American writings. English 210 recommended.
- 202 **American Literature II (3)**..... Spring Even
A study of selected prose and poetry from the Civil War to the present, reflecting the rise of realism, naturalism, and modernism. It will focus on novels of Mark Twain, Henry James, Willa Cather, and William Faulkner; prose and poetry from the Harlem Renaissance; drama of Eugene O'Neill, Tennessee Williams, and Arthur Miller; and shorter fiction and prose from the late 19th century to the present. English 210 recommended.
- 203 **Ethnic American Literature (3)**..... Fall Odd
Students will read, discuss, and write about literature from four different ethnic American groups: African-Americans, Native Americans, Asian-Americans, and Mexican-Americans. Major writers from the four different groups will be read, including Douglass, Ellison, Wright, Walker, Erdrich, Silko, Momaday, Cisneros, Gilb, Chavez, Yamamoto, Tan, and Mura. Open to freshmen. [Cross-listed: CORE 277]
- 205 **Adolescent Literature (3)**..... Spring Even
This course focuses on reading classic and contemporary works of adolescent literature. Students will consider this genre and its audiences, analyze several adolescent novels and stories, and think critically about the religious orientation and historical context of each work. The course will also explore contemporary issues crucial to adolescents and teenagers, including identity and adolescent psychology, sexuality, and social conformity. This course is appropriate for both majors and non-majors.
- 207 **World Literature I (3)**..... Fall Odd
A study of epic, drama, and romance foundational to Western civilization. Classical works include epics of Homer; tragedies of Aeschylus, Sophocles, Euripides; a comedy of Aristophanes; and selections from Ovid, Virgil, Augustine. Medieval works include *laisses* of Marie de France, Chanson de Roland, Boccaccio's *Decameron*, Chretien de Troyes' *Percival*, and Dante's *Inferno*. Renaissance works will be selected from Petrarch's sonnets; writings of Erasmus, Machiavelli, Rabelais, and Montaigne; a tragedy of Marlowe; Cervantes' *Don Quixote*; and Calderon's *Life is a Dream*—tracing the evolving hero and literary form as a reflection and catalyst of culture. [Cross-listed: Spanish 207]
- 208 **World Literature II (3)**..... Spring Even
A survey of world literature from the Enlightenment through the 21st century. Enlightenment works include Molière's *Tartuffe* and Voltaire's *Candide*. Romanticism works include Goethe's *Sorrows of Young Werther*, Pushkin's *Queen of Spades*, and selections from Becquer and Hugo. Realism works include Flaubert's *Madame Bovary*, Chekhov's *Cherry Orchard*, and selections from Baudelaire and Tolstoy. Twentieth/Twenty-first century works include Mann's *Death in Venice*, Brecht's *Good Woman of Setzuan*, Mulisch's *Assault*, Wieringa's *These Are the Names*, Puertolas's *Extraordinary Journey of the Fakir Who Got Trapped in an IKEA Wardrobe*, and selections from Lorca and Márquez. [Cross-listed: Dutch 208, French 208, Spanish 208]

- 210 **Introduction to Literary Studies (3)**Spring
Provides students with a foundation of knowledge and skills for work in the major. It does so by introducing them to the subject matter, critical schools and methods, research strategies, forms of responsive and critical writing, and major contested issues of the discipline.
- 220 **Introduction to Creative Writing (3)**Spring
A course in which students will read and write in four genres: poetry, fiction, creative nonfiction, and screenwriting/playwriting. The course will emphasize reading and research as the foundation for creative writing. It will also introduce students to workshoping creative writing and to an integrated understanding of faith and writing. Satisfies Core Program writing-intensive requirement.
- 221 **The Short Story (3)**Spring Odd
Introduces students to the contemporary short story. In addition to reading broadly in the genre through anthologies, students will study specific contemporary writers such as Alice Munro, Raymond Carver, Jane Smiley, Larry Woiwode, Carol Bly, or John Gardner via collections of their work. Tests and short papers will be required.
- 223 **Science Fiction (3)**Fall Even
This course surveys the genre of science fiction and its widespread impact on 20th and 21st century cultures. We will investigate many philosophical, theological, and scientific assumptions and debates in science fiction. Topics in course texts may include artificial intelligence, genetic engineering, space exploration, and the progress or destruction of civilization. We will also survey a variety of media: novels, short stories, films, TV shows, graphic novels, and video games. The course is appropriate for majors and non-majors alike.
- 225 **Film and Literature (3)**Occasional
Introduces students to film art and film criticism, compares and contrasts films to novels and stories, and examines worldviews of the various artists. The course will examine how filmmakers and writers use film language or print to imply or express their views. It will also examine the degree to which filmmakers merely reproduce the themes of a book or make their own statements, even undercutting the source.
- 241 **Introduction to Journalism (3)** Fall
An overview of how the insights and skills gained by journalists as they examine and understand the world can be used to sustain and build community. Students examine the reporter's role and mandate in society, the current state of the news media, and how Christians can use journalism to serve the public good by helping a civilization confront its challenges. The course emphasizes doing journalism with practice in several types of creative but factual storytelling for print, audio, and video media. Students also explore the historical and cultural foundations of journalism and investigate journalism theories. [Cross-listed: Communication 241]
- 242 **Advanced Reporting and Writing for the Public Media (3)**Spring
This course is designed to help students reach the next level when it comes to media storytelling. Students will practice the mechanics and methods professionals use to tell true stories that inform and engage the public. Developing the mind of a journalist, students will apply contemporary reporting strategies and writing fundamentals by covering real events on campus and in the community. [Cross-listed: Communication 242]
- 281- **Service-Learning (1-3)**Fall, Spring, Summer
283 See page 120, Individual Studies
- 301 **Advanced Expository Writing I (3)** Fall
Designed to introduce students to types of non-fiction writing frequently sought by magazines and journals. Major assignments include the interview, the narrative essay, and the review. Especially featured is the personal narrative. In addition to writing, students will read and react to various types of non-fiction writing—both essays and longer works. Significant class time is spent in workshop format, students reading and discussing their own work. Satisfies Core Program writing-intensive requirement. English 220 recommended. [Cross-listed: Communication 301]
- 302 **Advanced Expository Writing II (3)**Occasional
The primary goal of this course is to help students write with clarity, grace and power. To achieve this goal, they will write expository essays, hone research skills, work style exercises, and critique one another's papers. Note: Advanced Expository Writing I emphasizes narrative prose, while Advanced Expository Writing II emphasizes argumentative and explanatory prose. Satisfies Core Program writing-intensive requirement. [Cross-listed: Communication 302]
- 303 **Reading and Writing of Poetry (3)**Spring Odd
Students read and write various poems with fixed forms and in free verse. Students will explore how other poets get started and where they get their ideas for poems. Time in class will be spent discussing each other's poems, and each student will have at least three personal conferences with the instructor. By the end of the semester, each student will have a portfolio of at least a dozen poems. Prerequisite: English 220.
- 304 **Fiction Writing (3)**Spring
Introduces students to the task of writing fiction. In addition to significant reading in the genre, the course will require several exercises in various aspects of the craft, as well as the completion of one original short story. Time will be spent in workshop format and discussing technique, as well as the ways in which one's faith affects the work of writing fiction. Prerequisite: English 220.

- 305 **Business and Technical Writing (3)**Spring
Students will study the process, application, and characteristics of business and technical writing, and the way in which writing style, strategies, content, and clarity will relate practically to one's profession. Concentrates on developing competence in a variety of writing tasks commonly performed in business, law, industry, social work, engineering, agriculture, and medicine. Satisfies Core Program writing-intensive requirement. [Cross-listed: Communication 305]
- 306 **Writing Workshop for Teachers (3)**..... Fall
Designed to help pre-service teachers from across the disciplines to improve their writing and understanding of writing. Using an inquiry-based approach, students will seek to answer questions like—why do teachers write? What is successful writing? How does one improve their writing? Through reading and writing assignments, students will practice a variety of writing tasks. Satisfies Core Program writing-intensive requirement.
- 307 **Screenwriting (3)**.....Spring Odd
Students will gain insight into the process and the techniques involved in scriptwriting by studying film scripts and creating their own. Students will receive hands-on instruction in concept development, character development, plot structures, dialogue, and visualization. English 220 recommended.
- 308 **Songwriting (3)** Fall
A study in the craft of songwriting, particularly in lyrical composition. The course will cover listening, reading, and analyzing songs and song structure. Students will write and workshop songs. No ability to write music is required. English 220 recommended.
- 310 **Advanced Writer's Workshop (3)** Fall Odd, Summer Odd
Students will write a focused writing project in the genre of their choice (e.g., short stories, poetry, screenplays). The course will include craft lectures, writing and workshop time, and guest lectures and readings. Students will meet together in early May for 1-2 weeks, and then will work with a faculty mentor throughout the summer,, producing regular packets of original works, responses to assigned texts, and thorough revision. Prerequisites: one course from English 301, 303, 305, 307. Students may be allowed into the course without a prerequisite, pending a writing sample approved by the English department faculty.
- 312 **Shakespeare and Elizabethan Drama (3)**.....Fall Odd
Primary emphasis on a study of Shakespeare's plays: comedies, histories, and tragedies. Some attention to Shakespeare's sonnets, to other Elizabethan playwrights, and to background. One paper required. English 210 recommended.
- 314 **Earlier British Literature (3)**Fall Even
A survey of earlier British literature from the beginnings through the 17th century, including Beowulf, Chaucer, Sidney, Spenser, Shakespeare (his poems), Donne, Herbert, Jonson, and Bunyan. Special attention will be given to the Scriptural tradition that this literature evokes. Throughout, the course focuses on how the literature of these eras addresses fundamental questions about human nature. English 210 recommended.
- 316 **Later British Literature (3)**.....Spring Odd
A survey of British literature from the late 18th through the 20th century. The course will study the developments of Neo-classicism (Pope and Austen), Romanticism (Blake, Wordsworth, Coleridge, Keats, Shelley, the Brontës), Victorianism (Tennyson, the Brownings, Dickens, George Eliot), and Modernism (Yeats, Hardy, Conrad, Wilde, Lawrence, Joyce, Woolf, Waugh, and Lessing). English 210 recommended.
- 323 **Contemporary Literature (3)**Fall Even
The study of selected contemporary literature, particularly novels, written in the last fifty years to the present. Students will be exposed to acclaimed living writers. This course will consider global contemporary literature from non-Western cultures. Writers may include Margaret Atwood, David Foster Wallace, Marilyn Robinson, Khaled Hosseini, and Chimamanda Ngozi Adichie. English 210 recommended.
- 333 **History and Theory of Literary Criticism (3)**Occasional
Major works of literary criticism and theory of criticism, both classic works from Plato through Eliot and key works drawn from the ferment of contemporary theory will be analyzed, with the aim of formulating clearer Christian theories of literature. Prerequisite: CORE 200. English 210 recommended. [Cross-listed: CORE 323]
- 335 **History of the English Language (3)**.....Spring Odd
Surveys the Indo-European languages; the emergence, development, and flowering of the Anglo-Saxon language; the seven English dialects; the Chaucerian dialect; and the contributions of the Greek, Latin, and French language and cognate words.
- 336 **English Grammar (3)** Fall
A study of traditional and rhetorical grammar. Students will approach English grammar as not only a technical subject but also a craft, a field for research and scholarship, and a domain with socio-cultural, political, and ethical dimensions. As they develop their own arguments, voice, and editing skills, they will explore various topics through readings, discussions, practice exercises, research projects, and writing activities that require them to apply grammar knowledge in context.

338	Topics in Literature (3)	Occasional
	A focused course that will concentrate on a particular author, group of authors, idea, theme, genre, or historical period—typically one not covered by the regular English-major curriculum. The course will consider its topic in terms of religious orientation and worldview, the historical development of literature, and contemporary responses to literature. Topics will be selected by instructors. Possibilities including environmental literature, the fantasy genre, or post-colonial literature. English 210 recommended.	
341-348	Special Topics (3)	Occasional
	Courses vary from year to year and are designed to meet special student interests and utilize staff strengths and the talents of experts in the community. Each course covers material not usually treated in regularly scheduled courses.	
391-393	Individual Studies (1-3)	Fall, Spring, Summer
	See page 120, Individual Studies	

English for Academic Purposes

For information on an ESL teaching endorsement, see the “Teacher Preparation Program,” *Teaching English as a Second Language K-12*, page 93.

101	Public Speaking and Academic Interaction (3)	Fall
	Develops academic speaking and listening skills, enabling students to participate to the best of their ability in the classroom and in independent study. Listening, note-taking, discussion, and presentation skills with a focus on North American English pronunciation patterns are practiced. Vocabulary is expanded throughout the course. Satisfies Core Program communication competency requirement. Open to non-native English speakers only.	
102	Academic Writing (3)	Spring
	While engaging in a review of academic English grammar and usage, students learn to properly incorporate ideas from academic sources into their own writing. Skills such as critical reading, effective note-taking, proper summarizing, paraphrasing, and citation are presented and practiced. Satisfies Core Program English competency requirement. Open to non-native English speakers only.	
103	North American English Pronunciation (2)	Fall
	This course, which introduces students systematically to the sounds and rhythms that shape clear North American English speech, leading to better listening and clear speaking, is required for non-native speakers of English whose scores on the Entrance Interview for International and ESL Students qualify them. The course is also recommended for all non-native speakers of English who wish to or who are advised to take steps to improve their listening and speaking in English. Open to non-native English speakers only.	

Environmental Studies

The major in environmental studies seeks to cultivate stewardship of the creation as a lifestyle and profession through an interdisciplinary program of study. This program asks: 1) how does the world work; 2) what is right for us as Christians in our relationship to the rest of creation; and 3) how should we then live and work to be obedient stewards?

General Major— Foundation (common to all emphases): Environmental Studies 151, 152, 161, 303, 325; Biology 200; CORE 266 or Economics 202; one course from Mathematics 152, Statistics 131, 132.

Students must select one of the following emphases:

Environmental Science:	Foundation; Biology 122, 125, 215; Chemistry 111; Environmental Studies 251, 252; one course from Chemistry 122, 212, 225, 312; two courses from Biology 316, Environmental Studies 270, 320; two courses from Agriculture 201, Environmental Studies 201, 202; one course from Biology 302, 310, 324; two courses from Environmental Studies 333, 334, Political Science 333. Students must also complete one of the following: the Environmental Studies 358 and 380 sequence, a departmentally approved summer internship (Environmental Studies 393) or a departmentally approved off-campus course that complements their program.
Natural Resource Management:	Foundation; Biology 122, 125, 215, 316; Chemistry 111; Environmental Studies 251, 252, 270, 320; one course from Environmental Studies 333, 334, Political Science 333; one course from Agriculture 291, 315, 316, Biology 310, 324; one course from Agriculture 201, 311, 370, 371, Environmental Studies 201, 202. Students must also complete one of the following: the Environmental Studies 358 and 380 sequence, a departmentally approved summer internship (Environmental Studies 393) or a departmentally approved off-campus course that complements their program. One course from Chemistry 122, 225, 312 recommended.

Policy and Management: Foundation; Business Administration 205; Chemistry 110 or 111; Communication 311 or 314; Engineering 390; Environmental Studies 333, 334; Political Science 245, 312, 333; Political Science 202 or 214; Political Science 210 or 370; Agriculture 290 or Economics 321; one course from Biology 125, 316, CORE 216, Environmental Studies 270, 320. Students must also complete one of the following: the Environmental Studies 358 and 380 sequence, a departmentally approved summer internship (Environmental Studies 393), or a departmentally approved off-campus course that complements their program.

Courses in the following off-campus programs may substitute for up to four of the above with approval of the chair of environmental studies: Latin American Studies Program, Au Sable Institute of Environmental Studies, Creation Care Studies Program, or other approved off-campus study.

General Minors–

Environmental Science: Environmental Studies 151, 152, 161, 251, 252, 325; one course from Agriculture 370, 371, Biology 200; one course from Agriculture 201, Environmental Studies 201, 202, 303; one course from Biology 316, Environmental Studies 270, 320.

Environmental Studies: Environmental Studies 151, 152, 161, 303, 325; one course from Agriculture 201, Environmental Studies 201, 202; one course from Biology 316, CORE 216, Environmental Studies 270, 320; one course from Environmental Studies 333, 334, Political Science 333.

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- 151 **Introduction to Environmental Studies I (3)**..... Fall
An introduction to contemporary environmental studies and creation care, with emphasis on class discussion of relationships between human population and resource use in light of biblical teaching about environmental stewardship. Particular attention is given to the biotic and ecological dimensions of creation stewardship and planetary distress. Designed to be taken by environmental studies majors concurrently with Environmental Studies 161. [Cross-listed: Community Development 151, CORE 211, Earth Science 151]
- 152 **Introduction to Environmental Studies II (4)**Spring
Flowing from a foundation in physical and earth sciences, this course offers an introduction to energy and material use in Western society and examines the resulting impact on the environment. Contemporary practices and their historical roots are critiqued in light of Biblical norms for stewardship. An emphasis on evaluation and implementation of practical steps toward sustainability permeates the course with the goal of motivating and equipping students to become lifelong stewards. The laboratory portion of the course combines tours, laboratory measurements, economic analysis, and environmental analysis. Three lectures and one laboratory period of three hours per week. Environmental Studies 151 is not a prerequisite. [Cross-listed: Earth Science 152, CORE 222]
- 161 **Field and Laboratory Investigations in Environmental Studies (1)** Fall
A field and laboratory exploration of fundamental issues, concepts, and techniques of contemporary environmental studies with a biological and ecological focus. Includes visits to sites of natural history and stewardship interest both locally and regionally. Also includes an introduction to important technological tools in environmental studies and analysis of physical and biotic parameters of the environment. Required for students majoring or minoring in Community Development or Environmental Studies. Corequisite: Environmental Studies 151. [Cross-listed: Community Development 161]
- 201 **Introductory Geology and Physical Geography (4)**Spring Odd
A general introduction to the physical nature and structure of the solid Earth, including, briefly, its physical geography and a more detailed look at its geology. The environmental implications of these subjects are detailed. Three lectures and one laboratory period of three hours per week plus one overnight field trip and one or two shorter trips. [Cross-listed: CORE 223, Earth Science 201, Geography 201]
- 202 **Meteorology and Climate Change (3)**Fall Odd
Provides a general introduction to meteorology and weather. Climate and climate change in Quaternary times to the present are also considered. The implications of an anthropogenically enhanced greenhouse effect will be addressed, with particular attention given to the impact of these changes on the structure and function of ecosystems. Includes one or two field trips to relevant sites in the region. [Cross-listed: Earth Science 202, Geography 202]
- 251 **Environmental Chemistry (3)**Spring Odd
A study of the nature and transport of chemical species—both natural and human-introduced—in the natural environment (atmosphere, hydrosphere, geosphere, and biosphere). Three lectures per week. Prerequisite: Chemistry 109 or 111; or permission of instructor. Prior completion of Chemistry 122 or 225 recommended. [Cross-listed: Chemistry 251]
- 252 **Environmental Chemistry Laboratory (1)**Spring Odd
This lab will include methods of sampling and analysis of samples from natural and/or human influenced environments. Graded on an A-F scale. Corequisite: Environmental Studies 251. [Cross-listed: Chemistry 252]
- 270 **Avian Biology and Conservation (3)**Spring Even
The identification, natural history, ecology, and stewardship of birds. Topics include morphological and physiological ecology of birds, habi-

tat selection, communication, migration, reproductive ecology, territoriality, taxonomy, and conservation. The connections between avian ecology and creation stewardship will be explored. Recognition of a diverse set of birds by sight and sound is an important component of the course. Two lecture/discussion sessions and one three-hour lab per week. Field work will concentrate on local birds, but at least one trip to a distant site will be included. Prerequisite: one of Agriculture 101, Biology 122, CORE 212, Environmental Studies 151.

- 281- **Service-Learning (1-3)**Fall, Spring, Summer
283 See page 120, Individual Studies
- 303 **Geographic Information Systems and Surveying (4)**Fall Even
An introduction to the acquisition, analysis, display, manipulation, and management of geographic information. Course topics will include geographical data input, storage, maintenance, analysis, and retrieval. Students will utilize common GIS software and associated hardware. An overview of survey methods used to gather and quantify features of physical geography will be included. The course will meet in two studio lab classes to provide an integral learn-by-doing experience applying GPS technology, survey methods, and GIS applications. Application of GIS to agriculture, business, environmental management, and other disciplines will be provided in this course. Prerequisite: sophomore standing or above. [Cross-listed: Agriculture 303, Business Administration 303, Construction Management 207]
- 320 **Wildlife Ecology and Stewardship (3)**Spring Odd
Advanced examination of animal (especially terrestrial vertebrate) populations, communities, and habitats, particularly as such analysis is applied to the manipulation and exploitation of animal populations and communities to regulate their abundance and distribution and/or to restore them. Considerable exploration and critique of the development and practice of wildlife management, particularly as it compares to biblical principles for creation stewardship. Two lecture/discussion sessions and one three-hour lab per week. Additional activities include an overnight field trip and attending a wildlife conference. Prerequisite: one course from Agriculture 370, 371, Biology 200. [Cross-listed: Biology 320]
- 325 **Restoration Ecology and Applied Stewardship (3)**Spring Odd
An interdisciplinary capstone course designed to explore current research, thought, and issues in environmental stewardship with a focus on ecological restoration. Principles and practices of the discipline of restoration ecology will be explored and then utilized to develop a holistic restoration plan for a specific location. Conference attendance and regional travel to restoration sites are important components of the course. Prerequisites: Environmental Studies 151; junior or senior standing.
- 333 **Philosophy of the Environment (3)**Fall Even
A historical and systematic study of the structure and normed character of the various relationships between human beings and their environment. Prerequisites: CORE 200; junior or senior standing. [Cross-listed: Philosophy 333]
- 334 **Economics of Natural Resources and the Environment (3)**Fall Even
A study of economic aspects of Christian stewardship in relation to the environment and use of natural resources. Major topics include biblical norms on creation, property rights, economic justice, the economic dimensions of current environmental problems and trends in resource use, institutions and social structures that affect environmental policy, economic theories related to resource use and environmental quality, and evaluation of current and proposed policies from a Christian point of view. Prerequisite: Economics 202; or permission of instructor. [Cross-listed: Economics 334]
- 341- **Special Topics (3)**Occasional
348 Courses on topics of special interest and importance in creation stewardship, depending on student demand and instructor availability. These courses address topics that are not treated in depth in established courses.
- 358 **Introduction to Biological Research (1)**Fall, Spring
This is a mini-course designed to prepare students for directed senior research. The course will introduce the idea and practice of biological research. It will include the nature and scope of a research project, how to conduct literature searches, and how to design methods and protocols for problem solving. The class will meet weekly in seminar or tutorial format. Students will make weekly presentations of their progress, finalize their proposal for Environmental Studies 380, and (if appropriate) begin the work for the directed research project. Graded on a pass/no record basis. Prerequisites: Environmental Studies 151, 152; Biology 122, 200, 215. [Cross-listed: Biology 358, Chemistry 358]
- 373 **Environmental Studies Internship (3)**Fall, Spring, Summer
Students apply the principles of environmental science and/or policy in an off-campus setting working with businesses or non-profit organizations. Students will spend at least 120 hours at their placement site. Learning goals relevant to each situation will be developed and assessed. Weekly logs, a final written paper, and a poster or formal presentation are required. Prerequisite: junior or senior standing in the Environmental Studies Department.
- 380 **Directed Senior Research (3)**Fall, Spring
Focuses on identifying a stewardship problem and bringing rigorous analytical and critical thinking to bear in examining the problem, reporting on it, and making recommendations for its resolution. The research project will be chosen and conducted under the guidance of a faculty mentor and may investigate a problem from a natural science perspective in the field and/or laboratory or from a social science

perspective. With approval, the research may be conducted at an off-campus location. Prerequisite: Environmental Studies 358. [Cross-listed: Biology 380, Chemistry 380]

- 391- **Individual Studies (1-3)**Fall, Spring, Summer
393 See page 120, Individual Studies

French

General Minor– French 201, 202, 206; Linguistics 201; one course from French 102, 341-348; French 204 or 208; three semesters of French conversation 251-258. Study-abroad courses are required.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 86-99, Teacher Preparation Program.

- 101 **Elementary French I (4)**Fall Even
An introductory study of the language and culture of French-speaking people. Emphasis is on the acquisition of oral and written language skills in a communicative context, combined with the study of cultural etiquette and social customs.
- 102 **Elementary French II (3)**Spring Odd
Continuation of French 101. Passing this class with a good grade will enable students to be successful at the DELF (Diplôme d'études en langue française) A1 proficiency exam. Prerequisite: one year of high school French or French 101.
- 201 **Intermediate French I (3)**Fall Odd
An intermediate course that continues the study of the language in a communicative context with considerable emphasis upon precision and expansion of linguistic skills. Emphasis on the development of cultural understanding and sensitivity with a study of the people's values and beliefs as expressed in their economic, political, and religious systems. Comparison of this culture with our culture in the light of the cultural mandate. Prerequisite: two years of high school French or French 102.
- 202 **Intermediate French II (3)**Spring Even
Continuation of French 201. Prerequisite: French 201 or its equivalent.
- 204 **Literary and Cultural Readings (3)**Occasional
This course continues the development of French language skills, and an understanding and appreciation of Francophone cultures through literary readings with an emphasis on contemporary literature. Prerequisite: French 202 or its equivalent. This course will be taken in an off-campus program; consult the Department of Language Studies for a list of possibilities.
- 206 **French Culture (3)**Occasional
Designed to cover many aspects of the French way of life. Listening and speaking skills will be developed through the classroom activities. Prerequisite: French 202 or its equivalent. This course will be taken in an off-campus program; consult the Department of Language Studies for a list of possibilities.
- 208 **World Literature II (3)**Spring Even
See English 208 for course information. [Cross-listed: Dutch 208, English 208, Spanish 208]
- 251- **Conversation (1)**Fall, Spring
258 These courses are designed to give the student practice in listening and speaking. The content of the courses will be altered each year. The class will meet two times each week. Graded on a pass/no-record basis. Prerequisite: French 201; or permission of instructor.
- 281- **Service-Learning (1-3)**Fall, Spring, Summer
283 See page 120, Individual Studies
- 341- **Special Topics (3)**Occasional
348 The topics for these courses will be chosen from the areas of literature, advanced language studies, culture, or teaching methods. The offering of the courses as well as the content will reflect student interest and need. Prerequisite: department approval.
- 391- **Individual Studies (1-3)**Fall, Spring, Summer
393 See page 120, Individual Studies

General Studies

Associate of Arts Degree Options Area of Concentration (Associate of Arts in General Studies)

See the "Academic Program" section for the Core Program for all A.A. programs (pages 22-23).

Seven courses that have been designed in consultation with and approved by the registrar to meet specific educational goals of the student.

Geography

- 151 **World Regional Geography: Peace and Justice on the International Stage (3)** Fall
A survey of major geographical regions of the world including politics, economics, and cultures. Emphasis is on the interrelatedness of regions and how peace and justice are linked to human flourishing. [Cross-listed: CORE 265]
- 201 **Introductory Geology and Physical Geography (4)** Spring Odd
A general introduction to the physical nature and structure of the solid Earth, including, briefly, its physical geography and a more detailed look at its geology. The environmental implications of these subjects are detailed. Three lectures and one laboratory period of three hours per week plus one overnight field trip and one or two shorter trips. [Cross-listed: CORE 223, Earth Science 201, Environmental Studies 201]
- 202 **Meteorology and Climate Change (3)** Fall Odd
Provides a general introduction to meteorology and weather. Climate and climate change in Quaternary times to the present are also considered. The implications of an anthropogenically enhanced greenhouse effect will be addressed, with particular attention given to the impact of these changes on the structure and function of ecosystems. Includes one or two field trips to relevant sites in the region. [Cross-listed: Earth Science 202, Environmental Studies 202]

Health and Human Performance

General Major— Foundation (common to all emphases): Health and Human Performance (HHP) 101, 206, 207, 208, 308; Biology 203.

Students must select one of the following emphases:

- Exercise Science: Foundation; HHP 202, 211; HHP 325 or Psychology 382; one course from HHP 361, 362, 371, 393. Chemistry 110 and 122 strongly recommended.
- General: Foundation; HHP 325; four elective courses from HHP 202, 205, 209, 211, 212, 213, 214, 215, 216, 217, 305, 306, 371, 393. (Note: 212-217 are half courses.)
- Sports Management: Foundation; Business Administration 100, 200, 205, 206, 207; one course from Business Administration 226, 304, 308, 333; one course from Communication 220, 222, 228; CORE 266; English 305; HHP 251, 253, 300, 325; HHP 362 or 373.
- General Minor—** Six approved courses within the HHP course offerings. Courses may be tailored to meet individual goals. The HHP department chairperson must approve the six courses.

Coaching Authorization—Licensure to Coach in the State of Iowa – see page 93. For information on licensure, see web site www.state.ia.us/boee/doc/faqs_cch.asp.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 86-99, Teacher Preparation Program. For a description of the Master of Education program, see pages 156-170.

I. ACTIVITIES AND INTERCOLLEGIATE SPORTS PARTICIPATION

As part of the Core Program requirements, every student must complete an activity component that may include one of the following activities. Graded on a pass/no-record basis.

- 011 **Intercollegiate Athletics (.5)** Fall, Spring
Arrangements must be made through the athletic director.
- 012 **Tumbling/Gymnastics (.5)** Occasional
Development of beginning and intermediate skills and techniques in gymnastics and tumbling, including work in free exercise.

- 013 **Step Aerobics (.5)** Fall, Spring
An opportunity for students to work on a personal fitness program through vigorous exercises to music.
- 014 **Voice and Body Warm-ups (.5)** Fall, Spring
A program of regularly repeated exercises designed to improve the performer's physical flexibility and vocal strength and range.
- 015 **Adaptive Program (.5)** Fall, Spring
Restricted activity for students with physical disabilities. Prerequisite: recommendation by a medical doctor.
- 019 **Other Activity (.5)** Occasional
The HHP department may offer additional activities based on staffing, facilities, and student interest.

II. CLASSROOM COURSES

- 101 **Introduction to Health, Physical Education, and Sports Management (3)** Fall, Spring
Designed to be the entry-level course for those interested in exploring the areas of health, physical education, and sports management. The course will provide the student with an overview of the body of knowledge, the historical background, and career opportunities in each of the areas. The student will also develop and articulate a Christian perspective on health, physical education, and sports management.
- 202 **Substance Abuse and Consumer Health (3)** Spring
The first half of the course is devoted to introducing the student to the use, misuse, and abuse of drugs. Emphasis is placed on the psychological and physiological effects of drugs. The second half of the course will provide the student with basic health-related information that will aid the student in making sound decisions regarding personal health.
- 205 **Curriculum in Physical Education and Health (3)** Fall Even
Provides the student with the necessary background in organizing and administering a desirable curriculum in physical education and health (elementary and high school), including intramurals and adaptive programs.
- 206 **Exercise Physiology and Biomechanics (3)** Spring
A study of the anatomy of human movement, including the application of physical laws of motion to the human body and how the body functions in and responds to exercise. Biology 203 strongly recommended.
- 207 **First Aid and Athletic Injuries (3)** Fall, Spring
A study of accepted methods used to prevent athletic injuries. Instruction in administering first aid practices in emergencies. Fall semester emphasizes the elementary school child; spring semester focuses on participants in interscholastic sports. Priority will be given to students majoring in health and human performance or pursuing a coaching endorsement. Prerequisite: junior or senior standing; or permission of instructor.
- 208 **Assessment in Physical Education and Health (3)** Fall
A study of elementary statistical procedures, the preparation and administration of physical fitness tests, health assessment procedures, and various athletic skills. A grading system in physical education and health is formulated.
- 209 **Personal and Community Health (3)** Spring Odd
This course examines the physical, mental, social, emotional, spiritual, and occupational dimensions of health. Emphasis is on the utilization of health information in making good health choices.
- 211 **Nutrition (3)** Fall, Spring
This course will focus on the basic science of foods and their components including relationships to health and disease. The implications of personal decision making and behavior change, as well as social, economic, and cultural influences, will be discussed. Does not count toward the biology major. [Cross-listed: Biology 210]
- 212 **Coaching Theory of Basketball (1.5)** Spring
Seven-week course with emphasis on coaching skills, philosophies, and techniques of basketball. Not open to freshmen.
- 213 **Coaching Theory of Track and Field (1.5)** Spring Even
Seven-week course with emphasis on coaching skills, philosophies, and techniques of track and field. Not open to freshmen.
- 214 **Coaching Theory of Volleyball (1.5)** Spring Odd
Seven-week course with emphasis on coaching skills, philosophies, and techniques of volleyball. Not open to freshmen.
- 215 **Coaching Theory of Baseball/Softball (1.5)** Spring Even
Seven-week course with emphasis on coaching skills, philosophies, and techniques of baseball and softball. Not open to freshmen.

UNDERGRADUATE ACADEMIC OFFERINGS: HEALTH AND HUMAN PERFORMANCE

- 216 **Coaching Theory of Soccer (1.5)**.....Spring Odd
Seven-week course with emphasis on coaching skills, philosophies, and techniques of soccer. Not open to freshmen.
- 217 **Coaching Theory of Football (1.5)**Spring
Seven-week course with emphasis on coaching skills, philosophies, and techniques of football. Not open to freshmen.
- 251 **Introduction to Sports Management (3)**..... Fall
An introductory course exploring the history, development, and governance as well as current issues and trends in sports management. Emphasis will be placed on developing a reformed, biblical perspective concerning athletics and the role athletics plays in Western culture.
- 253 **Planning and Maintaining Sports Facilities (3)**Spring
Through debates, presentations, and literature reviews, students will learn to calculate space needs, estimate costs and projected uses for sport and recreation facilities, and apply the steps of facility planning. We will also discuss how a reformed, Christian perspective guides our priorities and decision making processes. Prerequisite: HHP 251.
- 281- **Service-Learning (1-3)**.....Fall, Spring, Summer
283 See page 120, Individual Studies
- 300 **Sports Law (3)**.....Spring
Students will examine legal and ethical principles, laws, and regulations relating to sports management. In particular, the class will focus on the areas of contract, torts, agency law, employment law, risk management, and the acquisition of management and personal information. Through the course text, course lectures, course debate, and analysis papers, students will develop their ability to apply Christian and legal-ethical principles to current legal issues and case studies. Prerequisites: HHP 251, 253.
- 305 **Peer Teaching in Physical Education and Health (3)**.....Fall Odd
Provides an opportunity to apply the teaching skills and methods of physical education and health in a high school and peer-teaching setting. The focus is how to teach activities and health concepts to high school students.
- 306 **Methods of Teaching Physical Education and Health in Grades P-8 (3)**..... Fall
Provides background for teaching physical education and health to preschool and elementary school children. Emphasis is given to adaptive physical education methods. This course is open only to students pursuing the elementary physical education and/or health endorsements.
- 308 **Motor Learning and Development (3)**..... Fall
The course introduces the major concepts of motor control and motor learning as they are expressed across the human lifespan. The course emphasizes the practical application of these theories in teaching, coaching, and therapy settings. The course will also explore how a reformed view of the person informs our understanding of motor learning and the resulting implications for teaching, coaching, and therapy. Prerequisites: Biology 203, HHP 206.
- 325 **Psychosocial Dimensions of Physical Activity (3)** Fall
This course adds to students' understanding of physical activity by exploring the psychological and sociological aspects of human physical activity. Also, students will demonstrate a Reformed Christian understanding of human movement in discussion of a variety of issues related to health and human performance. Prerequisites: Psychology 201 or 204 or Sociology 201; junior or senior standing.
- 361 **Field Experience in Physical Therapy (3)**..... Fall, Spring
Designed to give students enrolled in the pre-physical therapy program a field experience in physical therapy. The student will work with a registered physical therapist for three hours each week of the semester. This course is open to junior and senior students enrolled in the pre-physical therapy program.
- 362 **Field Experience in Sports Management (3)**..... Fall, Spring
Designed to give students the opportunity to do a practicum in a sports management setting. The student will work under the supervision of a professional sports management leader for three hours each week of the semester. This course is open to junior and senior students who have completed two of the following courses: HHP 251, 253, 300.
- 371- **Health, Physical Education, Sports Management Internships (3-9)**.....Fall, Spring, Summer
373 Intended to provide the HHP major the opportunity to apply knowledge principles and skills gained from the classroom into a workplace environment. Prerequisite: completion of no less than seven courses in the major. See HHP internship coordinator for approval.
- 391- **Individual Studies (1-3)**Fall, Spring, Summer
393 See page 120, Individual Studies

History

General Major– Foundation (common to both emphases): History 201 or 230; one course from History 212, 213, 214; History 280, 380; History 388 or 389.

Students must select one of the following emphases:

General: Foundation; eight additional history courses above 214, at least three of which must be at the 300-level (must choose at least two courses from History 202, 301, 306, 307, 308 and at least three courses from History 220-226, 230, 319, 321, 326, 327, 328, 335).

Museum Studies: Foundation; History 260, 365; seven history courses above 214, at least three of which must be at the 300-level (must choose at least two courses from History 202, 301, 306, 307, 308 and at least three courses from History 220-226, 230, 319, 321, 326, 327, 328, 335); Business Administration 100; Communication 228 or 260; Political Science 214 or 245; one course from Art 207, 208, 209, 240, Theatre Arts 103. Education 101 or Psychology 204 recommended, but not required.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 86-99, Teacher Preparation Program.

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| 201 | Survey of American History (3) Fall
A survey of the main contours of American history from 1750 to the present. CORE 140 recommended. |
| 202 | Themes in American History (3) Spring
This course leads students through historical inquiry of selected main themes in American society such as sports, war, politics, and culture. Students will gain an understanding of the historical and cultural development of these themes in the contemporary world. CORE 140 recommended. |
| 212 | History of the Muslim World (3) Spring Odd
A survey of the history of the Muslim world focusing on the Middle East, North Africa, and Southwest Asia. Primary emphasis is on the development and features of Muslim society and culture, the relations between Muslim and Western civilizations, and the sources of tension in the modern Muslim world. Not open to first-semester freshmen. Prerequisite: CORE 140. [Cross-listed: CORE 272] |
| 213 | Latin America (3) Fall Odd
A selective survey of the history of Latin America from pre-Columbian times to the present. Attention will be given to the indigenous and colonial origins of Latin American culture and society. Twentieth-century developments will be explored through a series of case studies. Not open to first-semester freshmen. Prerequisite: CORE 140. [Cross-listed: CORE 273] |
| 214 | East Asia (3) Spring Even
The history of East Asia, paying special attention to China, Japan, and Indonesia in the early-modern and late-modern periods. The primary emphasis will be on east Asian responses to the challenges represented by Western ideas, commerce, and imperialism in its various expressions. Not open to first-semester freshmen. Prerequisite: CORE 140. [Cross-listed: CORE 274] |
| 220 | Ancient History (3) Fall Even
This course surveys the development of ancient Western civilization from Egypt and Mesopotamia, through Greek and Roman civilizations, to the decline of the Roman empire. Among the themes focused on in the course are the diversification of culture and the migration of people, the development and diffusion of ideas, arts and technology, resources, and the formation of a "Western culture" up to the fall of Rome. Prerequisite: CORE 140. |
| 221 | Medieval Europe (3) Fall Odd
Surveys Medieval Europe from the decline of the Roman empire circa 400 A.D. to the emergence of the Renaissance circa 1350 A.D. This survey focuses on the development of European civilization, particularly the formation of political, economic, ecclesiastical, and intellectual structures, and the relations between these. Prerequisite: CORE 140. |
| 222 | Witch Hunts, Wars, and Reformations (3) Spring Even
The course explores European history and cultures from the late medieval origins of religious reform movements to the Treaty of Westphalia in 1648. Themes such as humanism, the Renaissance, the Protestant and Catholic Reformations, the Witch Hunts, the Wars of Religion, and the emergence of the secular state will be included. Prerequisite: CORE 140. |
| 223 | Early Modern Europe (3) Occasional
The history of Europe from the close of the Reformation period to the French revolution and Napoleonic wars, with particular reference to the rise of modern science, the emergence of the European states system, and the thought of the enlightenment. Prerequisite: CORE 140. |

UNDERGRADUATE ACADEMIC OFFERINGS: HISTORY

- 224 **Age of Empires: 19th Century Europe (3)**.....Fall Even
The history of Europe from the Congress of Vienna to the outbreak of the First World War in 1914. The primary emphasis will be on the cultural, political, social, and economic developments in this period, with particular reference to the relations between the great powers and between Europe and other parts of the world. Not open to freshmen, except by permission of the instructor. Prerequisite: CORE 140.
- 225 **War and Peace: 20th Century Europe (3)**.....Spring Odd
The history of Europe from the immediate pre-First World War period to the end of the post-Second World War period as marked by the reunification of Germany and the 1991 Maastricht Treaty on European Union. The primary emphasis will be on the cultural, political, social, and economic developments in this period, with particular reference to the destructiveness of nationalism, the cold war, and the processes of European integration. Prerequisite: CORE 140.
- 226 **Themes in European and World History (3)**.....Occasional
This course leads students through historical inquiry of main themes in European and world history, including global interactions and encounters, various cultural phenomenon, and multi-confessional religious reformation. Students will gain an understanding of the historical and cultural developments of these themes in the contemporary world, and the process by which historical themes become relevant in the contemporary world. Prerequisites: CORE 140, 145; or by permission of instructor.
- 230 **Survey of Canadian History (3)**Occasional
A survey of Canada's history from the age of discovery and exploration to the present. The various forces and individuals that contribute to the making of Canadian nationhood will be stressed, but due time will also be devoted to the racial and sectional issues that have worked against national unity. Prerequisite: CORE 140; or permission of instructor.
- 260 **Introduction to Museum Studies (3)**.....Occasional
This course will provide introductory exposure to the main aspects of museum work. Topics will include structure and administration, funding and government relations, function, and exhibit design and display. Students will also address ethical, moral, and legal issues within the field from the perspective of a Christian historian. Prerequisites: CORE 140; History 280.
- 280 **Introduction to Historical Studies (3)** Spring
An introduction to the basic skills, methods, and resources of historical scholarship including the types of historical literature and scholarship, biblical foundations for historical interpretation, historiographical schools of interpretation, and uses of historical scholarship. Satisfies Core Program writing-intensive requirement. Prerequisite: CORE 140; or permission of instructor.
- 281- **Service-Learning (1-3)**.....Fall, Spring, Summer
283 See page 120, Individual Studies
- 301 **Colonial North America (3)**Fall Odd
An exploration of 16th and 17th century European colonial endeavors with particular attention to comparative cross-cultural encounters between Native Americans, Africans, and Spanish, French, Dutch, English, and Swedish colonists. Prerequisite: CORE 140. Some early modern European history recommended.
- 306 **From Puritanism to Pluralism: Religion in American Culture (3)**.....Spring Odd
Studies the development of religious movements and beliefs in the context of American history and culture. More specifically, this course examines the influence of religion in forming American social, political, and intellectual culture as well as how those aspects of American culture have shaped religious belief and practice. A special theme will be the relationship between the Reformed tradition and American culture. Previous study of American history is advised. Prerequisite: CORE 140. History 201 recommended.
- 307 **American Civil War and Reconstruction Era (3)**.....Fall Even
This course examines the period in United States history from the 1820s through 1880 focusing upon the causes and significance of the Civil War and its aftermath, Reconstruction. The course will examine the social, political, military, economic, and diplomatic issues of the period. A field trip to Civil War battlefields is an integral component of the class. Prerequisite: CORE 140. History 201 recommended.
- 308 **Media and Power: A History of Modern American Culture (3)**.....Spring Even
Examines the influence of mass media on the development of modern American culture. Typical topics include the role of the media in the resurgence of the Ku Klux Klan, the FDR administration, the civil rights movement, the 1960 presidential election, the counterculture movement, Vietnam, and the Gulf War. Prerequisite: CORE 140. History 201 recommended.
- 319 **Modern Middle East (3)**.....Spring Even
An in-depth study focusing on developments in the Middle East during the 20th century. Topics include de-colonization; "modernization" and the tension between western ideologies and Islam; Palestine, Israel, and the peace process; regional and global relations during and after the Cold War; the impact of the oil economy; urbanization; gender and family relations; and contemporary issues like water resources, ethnic conflict, human rights, and leadership change. Prerequisites: CORE 140; History 212; or permission of instructor.

- 321 **The Crusades: History and Memory (3)**Spring Odd
This course provides a solid historical foundation in the crusading movement and the role that crusades played in the development of the medieval church and theology. This course will also explore, evaluate, and analyze the process by which historical events, and more importantly the “memory” of those events, become relevant in, and even appropriated by, the modern world (specifically the modern West and Middle East). Finally, this course equips students with the necessary research skills of the historian with a major research project. Prerequisites: CORE 140, 145; or by permission of instructor.
- 326 **Thought and Society in Modern Europe (3)**Occasional
This course examines the main trends in the development of Western (i.e. European and North American) thought from the French Revolution to the rise of post-modernism. The course focuses on the general theme of changing views about the relationships between God, humanity, and nature, with special attention given to developments in, and the interaction between, philosophy, theology, social theory, and natural sciences. These themes are examined in relation to changing religious commitments, especially secularization, and social structures like industrialization. Prerequisites: CORE 140. Previous study of modern European or U.S. history or modern philosophy recommended.
- 327 **Topics in the History of the British Isles (3)**Fall Even
Special attention is given to the distinctive histories and national cultures of England, Ireland, Scotland, and Wales, the origins of Great Britain, the British experience of American independence, the acquisition and loss of empire, the crisis of 1940, and the historical origins of contemporary constitutional problems. Prerequisite: CORE 140.
- 328 **Forward to Revolution: Russian History and Culture (3)**Fall Odd
This class provides a solid historical foundation in Russian history through the lens of Russian literature with a secondary focus on art, music, and dance. Students will gain a better understanding of how the arts can become a vehicle for social commentary and criticism in a highly autocratic society where the government has placed severe limits on direct political and social discourse. Students will examine how a non-Western tradition of Christianity and other world and life view shaped and inspired historical and cultural development. Prerequisites: CORE 140, 145; or by permission of instructor.
- 329 **Dante’s Divine Comedy and the Italian Renaissance (3)**Fall Odd
This course begins as an in-class seminar during fall semester and concludes with a week-long trip to Italy in January. After spending several of our on-campus weeks on Dante’s Comedy, we will explore the transition between the medieval period and the Italian Renaissance, looking at how politics, art, business, science, and literature developed together under a Catholic worldview in Florence. After finishing the classroom part of the course, we will take a great trip to Florence, where we will see and study the city in person. [Cross-listed: CORE 289]
- 335 **History of Calvinism (3)**Occasional
A study of historic Calvinism as it was expressed by John Calvin and those who followed in his name. Explores the permutations and applications of Calvinism through time including, but not limited to, Counter Remonstrants, English and American Puritans, Hungarian Calvinists, Afrikaners, and the modern Dutch Calvinist movement. Prerequisites: CORE 140, 200. Some European history recommended. [Cross-listed: CORE 325]
- 341- **Special Topics (3)**Occasional
348 Each of these courses is devoted to a different topic, and each is designed to be a special-interest course utilizing individual instructor strengths, interests, and competencies. Each course will be concerned with a topic or period of history not usually treated to any great extent in regularly scheduled courses.
- 365 **History Internship (3)**Occasional
This course is designed to give students the opportunity to practically apply the concepts, theories, and knowledge they have acquired in the classroom in a professional setting. Students will be supervised by a faculty monitor and on-site supervisor. Prerequisites: junior or senior standing and approval of the department; Business Administration 100.
- 380 **Historiography (3)**Spring
This course covers the nature and meaning of history and the nature of the historian’s task and responsibilities. Emphasis is on review and evaluation of the various schools of history and of the philosophies of leading historians. Prerequisite: CORE 140. History 280 and advanced academic standing recommended.
- 388 **History Seminar–United States History Emphasis (3)** Fall
Focuses on writing a research paper about some aspect of the history of the United States. Students select a topic for in-depth study in order to implement and develop various skills learned in previous history courses. Emphasis is on mature evaluation of evidence, developing a historical interpretation in light of a biblical understanding of history, and constructing a narrative depicting the results of research. Open to juniors and seniors only. Prerequisites: CORE 140; History 280, 380.
- 389 **History Seminar–World History Emphasis (3)** Fall
Focuses on writing a research paper about some aspect of world history. The course description and requirements are the same as History 388. Open to juniors and seniors only. Prerequisites: CORE 140; History 280, 380.

391-	Individual Studies (1-3)	Fall, Spring, Summer
393	See page 120, Individual Studies	

Individual Studies

The individual studies major provides an opportunity for specially qualified students to plan a specific program in an area of study not formally developed by the university as a major. The individual studies major is intended for a limited number of students who are self-motivated and mature, in addition to having the ability to articulate clear and concise goals, work independently, and carry a project to completion. A student desiring to complete an individual studies major must submit a proposal to the registrar no later than the end of the junior year. The proposal must include a rationale for why an individual studies major meets the educational goals of the student, and a sequence of courses that meet those goals and will make up the student's major. This major should be no less than 45 credits that ensure depth and breadth of understanding in the area(s) selected.

Students who wish to plan an individual studies major should see the registrar to discuss the specific requirements and policies (students must have a 2.50 GPA with a minimum of 30 credits to be eligible). The registrar will work with the student to find a faculty member to assist the student in writing the proposal and serve as faculty advisor for the student. If, at any time, it becomes apparent that the student is not qualified to continue or is not carrying out the program as approved, the faculty advisor and/or the registrar can terminate the individual studies major.

281	Service-Learning (1)	Fall, Spring, Summer
	Open to qualified students with permission from the department, director of service-learning, and the registrar. See page 40, Individual Studies for application procedures and policies governing service-learning courses. Graded on a pass/no-record basis.	
282	Service-Learning (2)	Fall, Spring, Summer
	Open to qualified second semester freshmen, sophomores, juniors, and seniors with permission from the department, director of service-learning, and the registrar. See page 40, Individual Studies for application procedures and policies governing service-learning courses. Graded on an A-F scale.	
283	Service-Learning (3)	Fall, Spring, Summer
	Same as Service-Learning 282.	
391	Individual Studies (1)	Fall, Spring, Summer
	Open to qualified students with permission from the department and the registrar. See page 40, Individual Studies for application procedures and policies governing service-learning courses. The student will study a topic not normally included in regular course offerings that is interdepartmental in nature or that has a service-learning component. Graded on a pass/no-record basis.	
392	Individual Studies (2)	Fall, Spring, Summer
	Open to qualified juniors and seniors with permission from the department and the registrar. See page 40, Individual Studies for application procedures and policies governing service-learning courses. The student will study a topic not normally included in regular course offerings that is interdepartmental in nature or that has a service-learning component. Graded on an A-F scale.	
393	Individual Studies (3)	Fall, Spring, Summer
	Same as Individual Studies 392.	

Kuyper Honors Program

The Kuyper Honors Program (KHP) is an honors program that invites highly motivated and academically strong students to participate in a hospitably challenging learning community. In this program, Kuyper Scholars will be introduced to foundational Christian and Reformed thought and will actively engage in Christian research and scholarship in a supportive and challenging community. Throughout their undergraduate experience, participating students work closely with the KHP faculty mentors to reach their goals. The program seeks to prepare our Kuyper Scholars for Kingdom service as potential leaders in the Christian community and the rest of the world while also enriching the academic atmosphere for all students and faculty at Dordt University. The Kuyper Honors Program is co-directed by Dr. Abby Foreman and Professor Donald Roth in consultation with a committee.

Admission to the Program Student admission into the Kuyper Honors Program depends on an entrance essay, letters of recommendation, and demonstrated academic ability. (For new freshmen, academic ability is demonstrated by letters of recommendation, a composite ACT score of 28 or higher, and a cumulative high school GPA of at least 3.50. For students with at least one semester of university work, requirements include two letters of recommendation from university faculty, a committee-approved academic record, and a GPA of at least 3.25.) Of primary importance are the entrance essay and letters of recommendation; these must demonstrate the student's character and potential for academic excellence in the pursuit of serviceable insight in the area of Christian scholarship. Interested freshman students should apply through the university Admissions Office. Students with a semester of university work should contact a Kuyper Honors Program co-director.

Course Requirements – Kuyper Honors Program General Minor–

KHP 110 (4 credits)

KHP Contracts (9 credits) – credits earned in 1-3 credit increments, depending on work completed

- Scholarly Service (3 credits) KHP 310-3
- Scholarship (3 credits) KHP 320-3
- Shared Learning (3 credits) KHP 330-3

For each activity that Kuyper Scholars propose to engage in to meet one of these contract requirements, the student (or students, in the case of KHP 331-3) will be required to submit documentation and present a brief oral defense. This process will require students to explain what they hope to accomplish through the experience and how that experience will meet the requirements of the particular KHP contract applied for.

Remaining KHP credits will be fulfilled from courses such as KHP 150, 200, 399, which are under development.

Prior to the fall of 2019, the program was known as the Kuyper Scholars Program and courses were designated as KSP.

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- 110 **Rhetoric and Christian Scholarship (4)**..... Fall
This course will introduce you to the ways in which we seek to communicate in the public square in order to create, maintain, and change culture. Emphasis is placed on research, listening, and rhetorical analysis applied to oral and written communication. You will also engage the question of the concept of Christian scholarship, worldview and the impact of a Christian perspective in our scholarly calling. Substitutes for CORE 120 and CORE 110 in the Core Program. Prerequisite: admission to KHP or an English ACT of 30 and permission of instructor.
- 310-3 **Scholarly Service Contracts (1-3)**.....Fall, Spring, Summer
A key aspect of the calling to Christian scholarship is the need to put your gifts to work in service to your community, be that within the institution or broader society. As Kuyper Scholars, you will actively contribute to the community through practical, meaningful service. These opportunities may take the form of working with a Dordt University faculty member on their research projects or working with a campus department or community nonprofit on a project to advance the mission of the organization.
- 320-3 **Scholarship Contracts (1-3)**.....Fall, Spring, Summer
The core of the calling to Christian scholarship is learning to join the broader scholarly conversation taking place in society. As Kuyper Scholars, you will work with a Dordt University faculty member in contracted learning experiences, typically as a supplement to a course you are enrolled in within your discipline. You will be able to guide your individual learning and scholarship on academic topics of your choosing. You will be encouraged and expected to submit your works of scholarship for publication or presentation in appropriate scholarly venues.
- 330-3 **Shared Learning Contracts (1-3)**.....Fall, Spring, Summer
The calling to Christian scholarship is a call to lifelong learning. As Kuyper Scholars, you will join together with one another and with Dordt University faculty members to engage in study that mirrors the way that learning occurs outside of the academy: through book discussions, focused studies, or special experiential learning opportunities that encourage you to explore your passion for the task of learning.
- 341 **Introduction to Christian Scholarship (1)**..... Fall
An intensive, discussion-based seminar that introduces you to the basic presuppositions of Christian scholarship, Calvinism as applied to scholarship and creativity in all disciplines, and Kuyperianism. It lays the foundation for Christian scholarship in the Kuyper Honors Program (KHP), your major, and your future careers. Prerequisite: admission to KHP.
- 342 **Rhetoric and Christian Scholarship (3)**.....Spring
An accelerated introduction to college writing, research, speaking, and listening skills, and an introduction to the requirements and expectations of the KHP. Substitutes for CORE 120 and CORE 110 in the Core program. Prerequisites: KHP 341 and admission to KHP or an English ACT of 30 and permission of the instructor.

Kuyper Honors Program Courses Under Development

- 150 **Biblical Foundations, Theology, and Imagination (3)**..... Spring
In this course, we will survey biblical revelation in its progressive unfolding of key ideas and institutions against their cultural-historical background and within their covenant setting. We emphasize the normativity of Scripture that reaches its fullness and fulfillment in Christ for all academic work. You will also engage the question of how to root your identity in the metanarrative of Scripture as well as some emphasis on Biblical theology. Substitutes for CORE 150 in the Core Program. Prerequisite: admission to KHP; other interested students are welcome and encouraged to seek permission of instructor.
- 200 **Christian Philosophy, Ethics, and Humanity (3)**..... Fall
Using figures from the history of Western philosophy as our guide, this class will challenge you to examine your own life, see why you do what you do, and evaluate how your actions are shaped by certain religious commitments. It will demonstrate the need for wisdom and discernment and will begin to equip you with the tools you will need (critical thinking, self-reflection, clear communication) to discern how

we are called to live as Christian disciples in today's day and age. You will further engage the question of how practice shapes your identity, how we understand our identity as image-bearers, and how we can discern deformative spirits of our age and respond to them as Christian disciples. Substitutes for CORE 200 in the Core Program. Prerequisite: admission to KHP; other interested students are welcome and encouraged to seek permission of instructor.

- 399 **Engaging Culture as Christian Scholars (3)**Spring
This is an inter-disciplinary, capstone course that helps you reflect upon issues you encounter in your life, evaluate them from a Christian perspective, and practically engage what it means to live out your biblical perspective as a disciple of Christ. You will develop detailed reflections on your personal commitment to your Christian calling as well as a summative engagement with your education in the Core program. Substitutes for CORE 399 in the Core Program. Prerequisites: CORE 140; KHP 150, 200; second-semester junior or senior standing.

Latin

- 101 **Elementary Latin I (4)**Fall Even
An introductory study of the language through which students are taught how to understand and translate Latin prose and poetry, while becoming familiar with Latin grammar and syntax. The course will also focus on vocabulary acquisition, features of Roman history, life, and culture, as well as the nature of the impact of Latin on the English language.
- 102 **Elementary Latin II (3)**Spring Odd
Continuation of Latin 101. Prerequisite: Latin 101 or one year of high school Latin with permission from the instructor.
- 201 **Intermediate Latin I (3)**Fall Odd
Students will further a foundational understanding of verb conjugations and noun and adjective declensions, expand their Latin vocabulary, develop an understanding of Latin grammar, and sharpen Latin reading skills in the areas of classical prose and poetry. Prerequisite: Latin 102 or two years of high school Latin with permission from the instructor.
- 391- **Individual Studies (1-3)**Fall, Spring, Summer
393 See page 120, Individual Studies

Legal Studies

General Minor- Communication 302, 314; Criminal Justice 325; Philosophy 202; Business Administration 301, 302 or Criminal Justice 323, 324.

Linguistics

Interdisciplinary Minor-Linguistics 201, 301, 393; two courses from Dutch 102, 201, English 335, 336, French 102, 201, Biblical Languages 112, 211, Latin 102, 201, Spanish 102, 201; two courses from Communication 314, CORE 270, 281, 283, Education 355, English 207, 208, Philosophy 202, Psychology 218, 362, Theology 221.

- 201 **Introduction to Linguistics (3)**Spring
An introduction to the basic principles of linguistics, including phonetics (the sounds of language), morphology (the words of language), syntax (the sentence patterns of language), and sociolinguistics (how language functions in society). Data from different dialects of English and a variety of other languages will be used. Special attention will be given to a biblical view on language. No previous knowledge of linguistics is required.
- 301 **Applied Linguistics and English Phonology (3)**Fall Odd
An in-depth study of specific areas of linguistics, such as neurolinguistics (brain and language), psycholinguistics (language acquisition), computational linguistics (computer processing and language), and language change (how language has changed and still changes). One-third of the course is geared at the special interests of the students. ESL students will study the phonology (the study of sound patterns) of English and learn how to teach English pronunciation. Other students do research in a linguistic area of their interest, culminating in a research paper. Prerequisite: Linguistics 201.
- 391- **Individual Studies (1-3)**Fall, Spring, Summer
393 See page 120, Individual Studies

Mathematics

General Major– Computer Science 115; Mathematics 152, 153, 201, 203, 212, 291, 304, 311, 315, 390, 392; one three credit mathematics course numbered above 201; one course from Mathematics 341-348.

Mathematics/Computer Science Major– Computer Science 115, 116, 120, 204, 205, 215, 315, 340; one course from Computer Science 290, 319, 331; Mathematics 152, 153, 203, 207, 209, 212, 304; one course from Mathematics 201, 204, Mathematics 215 and 216; Computer Science 390 or Mathematics 390.

General Minors–

Applied Mathematics: Mathematics 152, 153, 291; three courses from Mathematics 201, 203, 204, 209, 315; Statistics 131 or 132.

Mathematics: Mathematics 152, 153, 203, 212, 291; one course from Mathematics 304, 311, 315; one three credit mathematics course numbered above 201.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 86-99, Teacher Preparation Program.

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- 100 **Mathematics for College (4)** Fall, Spring
This course prepares students for college-level mathematics through the study of algebra and geometry. The use of mathematical models will be woven throughout the course, providing students with the opportunity to see, understand, and use mathematics in a variety of applications. Also woven throughout is the understanding that mathematics is a creation of God, and must be used appropriately and responsibly. A one-hour tutorial session twice per week required. Prerequisite: an ACT mathematics score below 18 or ALEKS score below 30.
- 105 **Technical Mathematics (3)** Fall
The primary goal of the course is to give students the mathematical skills necessary to be successful in professional technical vocations. Problem solving, number sense, geometry, statistics, measurement, and financial mathematics will be taught using technical contexts. Woven throughout is the understanding that mathematics is a tool created by God which allows us to more effectively serve in professional technical fields. Prerequisite: an ACT mathematics score of 18 or higher or ALEKS score of 30 or higher; enrollment in Pro-Tech program.
- 105L **Technical Mathematics Lab (1)** Fall
An additional one credit tutorial session required for students with a score below 18 on the Mathematics portion of the ACT. Corequisite: Mathematics 105.
- 108 **Mathematics for the Elementary Teacher (3)** Fall Even, Spring
This course provides students the content knowledge needed for teaching elementary and middle school mathematics. The topics will show that mathematics is part of God's creation and how mathematics can be used to help understand and care for the creation. Specific topics include problem solving, numbers and numeration systems, computation and representation with integers, rational numbers and decimals, geometry and measurement. Prerequisite: elementary education major; an ACT mathematics score of 18 or higher or Mathematics 100.
- 115 **Algebra for College (3)** Fall, Spring
This course is a study and review of standard algebraic topics as a preparation for calculus. Main topics include linear and quadratic equations, functions, exponents, logarithms, rational expressions, and trigonometry. Solving equations, problem solving, graphing techniques, and the concept of function are unifying themes for the course. The main emphases include understanding the language of algebra and finding patterns and relationships in the structure of algebraic properties. While the course reviews essential rules for algebra, the focus will also be on practical, real-world applications of algebraic principles. Prerequisite: an ACT mathematics score of 18 or higher or ALEKS score of 30 or higher or Mathematics 100.
- 148 **Introduction to Financial Mathematics (2)** Fall
This course covers topics in basic interest theory including interest, annuities, and amortization as well as basic concepts in derivatives markets including stocks, bonds, forwards, puts, calls, spreads, and hedges. Course content is taught using a guided discovery approach focusing on student conceptual understanding. The course also includes discussion of Christian perspectives on investments and risk management. This course, along with Statistics 218, also serves as preparation for Actuarial Exam FM/2. Offered first half of fall semester. Prerequisite: an ACT mathematics score of 22 or higher or satisfactory completion of one course from Mathematics 100, 108, 115; strong algebra skills. [Cross-listed: Statistics 148]
- 149 **Explorations in Modern Mathematics (3)** Spring
This course is focused on exploring college-level mathematics relevant for all students, regardless of discipline. We will investigate modern mathematical topics including number theory, modeling, fractals, infinity, probability, making meaning from data, and decision-making. Mathematical thinking, reasoning, and pattern discovery will be particularly emphasized. A guided discovery approach will be utilized,

and we will discuss how a Reformed perspective impacts our view of the quantitative world. Prerequisite: an ACT mathematics score of 22 or higher or satisfactory completion of one course from Mathematics 100, 108, 115.

- 152 **Calculus I (4)** Fall, Spring
A study of the basic concepts and techniques of calculus for students in all disciplines. Topics include limits, differentiation, integration, and applications. This course is intended for students without any previous calculus credit. Prerequisite: grade of C- or higher in Mathematics 115 or equivalent.
- 153 **Calculus II (4)** Fall, Spring
Continuation of Mathematics 152; a study of transcendental functions, integration techniques, Taylor series approximations, calculus in polar coordinates, vectors, calculus of vector valued functions and applications of calculus. Students with one semester of calculus credit should take this course instead of Mathematics 152. Prerequisite: grade of C- or higher in Mathematics 152 or equivalent.
- 201 **Multivariable Calculus (3)** Spring
A study of differential and integral calculus of functions of several variables, and line and surface integrals. Prerequisite: grade of C- or higher in Mathematics 153.
- 203 **Elementary Linear Algebra (3)** Fall
An introductory study of vectors, matrices, linear transformations, vector spaces, determinants, and their applications, with particular emphasis upon solving systems of linear equations. Pre or corequisite: Mathematics 153; or permission of instructor.
- 204 **Differential Equations (3)** Fall
An introduction to the theory and techniques of solving elementary differential equations and the use of these techniques in applied problems. Prerequisite: grade of C- or higher in Mathematics 153.
- 207 **Number Theory (3)** Spring Even
An introduction to the main topics of elementary number theory, including divisibility, prime numbers, factorization congruences, number theoretic functions, and number theoretic equations. Pre or corequisite: Mathematics 212; or permission of instructor.
- 208 **Modern Geometry (3)** Fall Even
A study of the basic concepts of modern geometry, both Euclidean and non-Euclidean, with some attention given to finite and projective geometry. Prerequisite: grade of C- or higher in Mathematics 152; or permission of instructor.
- 209 **Numerical Analysis (3)** Spring Odd
A study of numerical methods for integration, differentiation, calculus of finite differences, and applications, using the computer. Prerequisites: grade of C- or higher in Mathematics 153; Computer Science 115.
- 212 **Discrete Structures (3)** Spring
A study of topics in discrete mathematics that are relevant to computer science and mathematics, including logic and proof, induction and recursion, elementary set theory, combinatorics, relations and functions, Boolean algebra, and introductory graph theory. Prerequisite: grade of C- or higher in Mathematics 152; or permission of instructor.
- 215 **Introduction to Univariate Probability (2)** Spring Odd
An introduction to the theory and techniques of general probability and common univariate probability distributions. Topics include but are not limited to basic set theory, introductory probability rules (independence, combinatorics, conditionals, Bayes theorem, etc.), common univariate distributions (e.g., binomial and normal) and expected value/variance. This course, along with Mathematics 216, also serves as preparation for Actuarial Exam P/1. Offered first half of the semester. Prerequisite: Mathematics 152. [Cross-listed: Statistics 215]
- 216 **Introduction to Multivariate Probability (2)** Spring Odd
An introduction to multivariate probability distributions. Topics include but are not limited to joint probability density functions, conditional and marginal probability distributions, moment generating functions, covariance and correlations, transformations and linear combinations of independent random variables. This course, along with Mathematics 215, also serves as preparation for Actuarial Exam P/1. Offered second half of the semester. Prerequisites: Mathematics 152, 215. [Cross-listed: Statistics 216]
- 218 **Intermediate Financial Mathematics (2)** Fall
This course covers intermediate topics in financial mathematics including progressing annuities, force of interest, duration, convexity, immunization, swaps, forwards and other topics on Actuarial Exam FM/2 that are not covered in Statistics 148. This course, along with Statistics 132, also serves as preparation for Actuarial Exam FM/2. Offered second half of fall semester. Prerequisite: Mathematics 148. Pre or corequisite: Mathematics 152. [Cross-listed: Statistics 218]
- 281- **Service-Learning (1-3)** Fall, Spring, Summer
283 See page 120, Individual Studies

- 291 **Problem-solving Seminar (1)**Fall Odd
Problem-solving is at the heart of doing mathematics. This seminar provides unity to the concepts and approaches learned throughout the mathematics major and minors as it examines various problem-solving techniques. Weekly sessions will be devoted primarily to presenting problem-solving techniques and solving a variety of problems. Open to sophomores, juniors, and seniors. Graded on a pass/no-record basis. Prerequisite: grade of C- or higher in Mathematics 152; or permission of instructor.
- 304 **Abstract Algebra I (3)**Fall Even
An introduction to algebraic structures **focused on** rings and fields. Connections between the ring of integers and the ring of polynomials over a field are developed and explored. Brief attention is given to groups. Prerequisite: grade of C- or higher in Mathematics 212; or permission of instructor.
- 305 **Abstract Algebra II (3)**Spring Odd
A continuation of Mathematics 304. A more extensive study of algebraic structures, focused primarily on groups. If time permits, the Galois correspondence will be explored. This course is offered as an individual studies course unless there is sufficient enrollment to warrant otherwise. Prerequisite: grade of C- or higher in Mathematics 304.
- 311 **Real Analysis I (3)**Fall Odd
An introduction to the content and methods of single-variable real analysis: infinite sets, the real number system, sequences, limits, series, continuity, differentiation, and integration. Prerequisite: grade of C- or higher in Mathematics 212; or permission of instructor.
- 315 **Complex Analysis (3)**Spring Even
A study of the complex number system, functions of complex numbers, integration, differentiation, power series, residues and poles, and conformal mappings. Prerequisite: grade of C- or higher in Mathematics 201; or permission of instructor.
- 341- **Special Topics (3)**Spring Even
348 These mathematics courses cover different topics that maximize individual instructor strengths, interests, and competencies. Each course will deal with a topic in mathematics not usually covered extensively in regularly scheduled courses.
- 390 **History of Mathematics (3)**Fall Odd
A survey of the history of mathematics from ancient times into the 20th century, in cultural context, with attention given to how the philosophy of mathematics relates to the development of mathematics. Prerequisite: grade of C- or higher in Mathematics 152; or permission of instructor.
- 391- **Individual Studies (1-3)**Fall, Spring, Summer
393 See page 120, Individual Studies. Permission of instructor required.

Medical Laboratory Science

The medical laboratory science major consists of three years of preparatory courses in biology, chemistry, and mathematics, with a fourth clinical year at an institution with an accredited medical laboratory science program. During the beginning of the third year, students will apply for acceptance to this program. After successful completion of the final year, students will graduate with a bachelor of science degree from Dordt University.

General Major– Biology 122, 125, 310, 325, 326, 357; Chemistry 111, 225, 321 or 322, 323; one course from Biology 304, 335, Chemistry 212, 312; Statistics 131; completion of the one year clinical program at a COMTE-certified college. Chemistry 261 and English 305 strongly recommended.

Students are advised to consult with the medical laboratory science program advisor to help choose other suitable courses in their area of interest.

Music

General Major– Foundation (common to all emphases): Music 103, 103L, 104, 104L, 203, 203L, 204, 206, 207, 208, 215, 222, 315; Music 19; six semesters of Music 09; six semesters of large ensembles. CORE 316/Philosophy 206 is the recommended advanced reformed thought course for music majors.

Students must select one of the following emphases:

Church Music: Foundation; Music 209, 305, 313; Music 283 or 393; Theology 241; one course from Music 312, 323, 326 or three courses from Music 316-319; six semesters of Music 240, 250, 260, or 270 selected in consultation with an advisor.

General: Foundation; six credits of electives in music; six semesters of Music 240, 250, 260, or 270 selected in consultation with an advisor.

UNDERGRADUATE ACADEMIC OFFERINGS: MUSIC

Music Management: Foundation; Business Administration 200 or 201; Business Administration 205, 206, 207; Business Administration 304 or Political Science 245; Communication 260; Music 373. Business Administration 100, English 305, and private music lessons recommended.

Performance and Pedagogy: Foundation; Music 209; Music 205 or 305; Psychology 204 (fulfills Core Program persons in community requirement); all of the courses in one of the following performance categories:

1. Organ: Six semesters of Music 260; Music 360 and 361; Music 393.
2. Piano: Six semesters of Music 250; Music 350 and 351; Music 326, 393.
3. Voice: Six semesters of Music 240; Music 340 and 341; Music 323, 393.
4. Instruments: Six semesters of Music 270; Music 370 and 371; Music 305, 391; one course in performance area selected from Music 316, 317, 318, 319.

Note: Students in performance and pedagogy must audition for acceptance into the program by the end of the sophomore year. Students in performance and pedagogy are required to present a half junior recital and a full senior recital. They must audition for the recital during the semester or year prior to the recital.

Students intending a career in Music Therapy should elect a general music major and a psychology minor.

General Minors–

Music: Music 103, 103L, 104, 104L, Music 205; one course from Music 206, 207, 208; a second course from Music 206, 207, 208 or one course from Music 209, 215, 222, 305; three semesters of Music 09; any combination of private lessons and ensembles adding up to a minimum of four credits.

Music Performance: Music 103, 103L, 104, 104L; one course from Music 205, 206, 207, 208; one course from Music 323, 326 or three courses from Music 316-319; three semesters of Music 09; four semesters of lessons in one performance area (240, 250, 260, or 270); one course from Music 340, 350, 360, 370; four semesters of large ensembles.

Note: Music performance minors must audition for acceptance into the minor program no later than their junior year. Music performance minors are required to present a half recital. They must audition for the recital during the semester or year prior to the recital.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 86-99, Teacher Preparation Program. For a description of the Worship Arts program, see page 155.

Ensembles (Graded on a pass/no-record basis)

010	Chorale (1)	Fall, Spring
011	Wind Ensemble (1)	Fall, Spring
012	Concert Choir (1)	Fall, Spring
013	Small Instrumental Ensemble (.5)	Fall, Spring
	A variety of small instrumental ensembles, including 4th Avenue Band.	
018	Small Vocal Ensemble (.5)	Fall, Spring
	A variety of small vocal ensembles, including 4th Avenue Singers and Bella Voce.	
020	Chamber Orchestra (.5)	Fall, Spring
	Study and performance of music for string orchestra.	
021	Northwest Iowa Symphony Orchestra (NISO) (.5)	Fall, Spring
	Study and performance of music for full symphony orchestra.	

Classroom Courses

009	Performance Class (0)	Fall, Spring
	Concert and recital attendance; presentations of special topics related to music.	
103	Music Fundamentals (3)	Fall
	A course laying the foundation for musicianship and further study in music through the study of music fundamentals, i.e., rudimentary skills in notation, analysis, and composition as well as exposure to basic music literature.	

- 103L Ear Training I (1)** Fall
The development of basic skills in the reading and notation of rhythm and of diatonic melodies in major and minor, in hearing and playing primary triads, and in identifying major and minor scales and simple intervals. Corequisite: Music 103 or advanced placement.
- 104 Diatonic Harmony (3)** Spring
Continuation of Music 103 through all aspects of diatonic harmony. Prerequisite: Music 103 or advanced placement.
- 104L Ear Training II (1)** Spring
Continuation of Music 103L. The further development of skills in the reading and notation of more complex rhythms and of diatonic melodies, in singing in alto clef, in hearing and singing all simple diatonic intervals, in hearing and singing all diatonic triads, and in identifying major, minor, and some modal scales. Prerequisite: Music 103L or advanced placement.
- 203 Chromatic Harmony (3)** Fall
Continuation of Music 103-104, with focus on advanced and chromatic harmony. Prerequisite: Music 104 or advanced placement.
- 203L Ear Training III (1)** Fall
Continuation of Music 104L. The further development of skills in the reading and notation of complex rhythms and chromatic melodies, in singing in both alto and tenor clef, in hearing and singing compound intervals, in identifying major, minor, modal, and whole tone scales, and in reading figured bass and lead sheet. Prerequisite: Music 104L or advanced placement.
- 204 Contemporary Music Theory and Literature (3)** Spring Odd
A study of musical theories, compositional techniques, and literatures of the 20th and 21st centuries with emphasis on the development of personal commitments to and strategies for promoting a Christian vision of life as a musician. Prerequisite: Music 203 or advanced placement.
- 205 Introduction to Music Literature (3)** Spring Even
A survey of the basic repertoire and of masterpieces in several genres (art songs, symphonies, concerti, major choral works, etc.), involving extensive and intensive listening, and study of style and form.
- 206 Music History and Literature I (2)** Fall Even
Study of the literatures, cultural contexts, and intertextual relationships of Western music, from Antiquity through the 15th century. Prerequisite: Music 104; or permission of instructor.
- 207 Music History and Literature II (2)** Spring Odd
Study of the literatures, cultural contexts, and intertextual relationships of Western music, from the 15th through the 18th century. Prerequisite: Music 104; or permission of instructor.
- 208 Music History and Literature III (2)** Fall Odd
Study of the literatures, cultural contexts, and intertextual relationships of Western music, from the 18th through the 19th century. Prerequisite: Music 104; or permission of instructor.
- 209 Music in Worship (3)** Spring Even
An overview of the role of music in worship, worship music repertoire, and information and skills needed to plan music for worship. [Cross-listed: Theology 333, Worship Arts 333]
- 215 Basic Conducting (2)** Fall Odd
An introduction to conducting technique.
- 222 World Music (3)** Spring Even
Examination of music heard in various contemporary world cultures, its aesthetic and stylistic aspects as well as its functions and underpinning ideas and values. [Cross-listed: CORE 278]
- 281- Service-Learning (1-3)** Fall, Spring, Summer
283 See page 120, Individual Studies
- 305 Orchestration (3)** Spring Odd
A study of transposition, instrumental ranges, and balance by arranging keyboard and choral works for instrumental ensembles.
- 306 Music and Digital Technology (3)** Spring Odd
The course surveys modern uses of digital technology relating to sound and develops skills relating to the most common types of manipulating digital sound.

UNDERGRADUATE ACADEMIC OFFERINGS: MUSIC

- 312 **Teaching General Music (3)**.....Fall Even
Teaching techniques and materials for the prospective music educator. This course will address philosophical foundations, content, methodologies, materials, technologies, and curriculum development for K-12 general music. Prerequisite: Education 201 or 202 or 203; or permission of instructor.
- 313 **Choral Music Education (3)**Fall Odd
Teaching techniques and methods for the prospective vocal music educator. Designed for those preparing to teach choral music in middle and secondary schools, this course also deals with repertoire selection and rehearsal planning and techniques, and is therefore suitable for those preparing to enter the field of church music. Prerequisite: Education 201; or permission of instructor.
- 314 **Instrumental Music Education (3)**Fall Even
Teaching techniques and materials for those planning to teach elementary and/or secondary instrumental music. Prerequisite: Education 201; or permission of instructor.
- 315 **Advanced Conducting (2)**.....Spring Even
Continued study of conducting with attention to specific choral and instrumental techniques. Prerequisite: Music 215.
- 341- **Special Topics (3)**Occasional
348 These courses vary from year to year and are designed to meet special student interests and utilize staff strengths and the talents of experts in the community. Each course will cover material not usually treated in regularly scheduled courses.
- 373 **Music Management Internship (1-3)**Fall, Spring
Intended to provide the music management major the opportunity to apply the knowledge, principles, and skills gained in the classroom in an actual music management environment. Prerequisite: junior or senior status; 2.00 minimum GPA.
- 391- **Individual Studies (1-3)**Fall, Spring, Summer
393 See page 120, Individual Studies

Pedagogy

- 316 **Brass Pedagogy (1)**Fall Even
Methods of teaching brass instruments.
- 317 **Woodwind Pedagogy (1)**Spring Odd
Methods of teaching woodwind instruments.
- 318 **String Pedagogy (1)**Spring Even
Methods of teaching string instruments.
- 319 **Percussion Pedagogy (1)**Fall Odd
Methods of teaching percussion instruments.
- 323 **Vocal Pedagogy (2)**Spring Even
Methods of teaching voice.
- 326 **Piano Pedagogy and Literature (3)**Occasional
Study of techniques and methods of teaching piano and survey of literature for the piano.

Private Instruction

Private instruction is available to music majors and non-majors in the following areas. Instrumental lessons will be transcribed indicating the specific instrument (e.g., trumpet or violin). All lessons are graded on an A-F basis and can be repeated for credit each semester.

- 04 **Group Voice Lessons (1)**Fall, Spring
- 05 **Group Piano Lessons (1)**Fall, Spring
- 07 **Group Instrumental Lessons (1)**Fall, Spring
- 19 **Piano Proficiency (0 credit)**Fall, Spring
Passing the piano proficiency requirement is necessary for certain majors and minors in music. Piano proficiency is demonstrated by passing a test administered by the music department. Preparation for this test may be gained through taking piano lessons.

240	Private Voice Lessons (1).....	Fall, Spring
250	Private Piano Lessons (1).....	Fall, Spring
260	Private Organ Lessons (1).....	Fall, Spring
270	Private Instrument Lessons (1)	Fall, Spring
280	Composition Lessons (1).....	Fall, Spring

The following advanced study courses are open only to students in major or minor programs of study requiring them. Admission is by audition; dates of the qualifying juries are posted in the music building.

340	Advanced Voice Study (3)..... Advanced voice literature and preparation of a half junior or senior recital.	Fall, Spring
341	Advanced Voice Study (3)..... Advanced voice literature and preparation of a full senior recital. Prerequisite: Music 340	Fall, Spring
350	Advanced Piano Study (3)	Fall, Spring
	Advanced piano literature and preparation of a half junior or senior recital.	
351	Advanced Piano Study (3)	Fall, Spring
	Advanced piano literature and preparation of a full senior recital. Prerequisite: Music 350	
360	Advanced Organ Study (3)	Fall, Spring
	Advanced organ literature and preparation of a half junior or senior recital.	
361	Advanced Organ Study (3)	Fall, Spring
	Advanced organ literature and preparation of a full senior recital. Prerequisite: Music 360	
370	Advanced Instrument Study (3)	Fall, Spring
	Advanced instrumental literature and preparation of a half junior or senior recital.	
371	Advanced Instrument Study (3)	Fall, Spring
	Advanced instrumental literature and preparation of a full senior recital. Prerequisite: Music 370	

Nursing

The bachelor of science in nursing (B.S.N.) is a four-year program of study. Students will complete CORE courses, pre-requisite courses, and nursing courses on Dordt University's campus. Clinical will be in area hospitals and in the surrounding community. Students will be eligible for NCLEX-RN state board licensure upon completion of the B.S.N.

The Dordt B.S.N. program is approved by the Iowa Board of Nursing. Accreditation was granted by the Commission on Collegiate Nursing Education in 2012. (CCNE, One Dupont Circle, NW, Suite 530, Washington, D.C. 20036-1120, (202) 887-6791)

General Major– Biology 203, 204, 210, 302; Chemistry 102; Psychology 204, 224; Sociology 201; Statistics 131; Nursing 180, 190, 201, 202, 203, 204, 207, 208, 212, 213, 214, 217, 218, 228, 237, 301, 302, 310, 311, 312, 317, 325, 390.

180	Introduction to Nursing Practice (1)	Fall, Spring
	This course introduces nursing majors to the practice of nursing as they explore nursing as a verb and a noun. As the student explores their vocation as a Christian nurse, foundational concepts studied include caring, compassionate accompaniment, advocacy, and scope of practice. Ethics in health care is introduced.	
190	Understanding Nursing Education (1)	Fall, Spring
	This course introduces nursing majors to the study of nursing practice as a preparation for licensure and for life-long learning as a professional nurse. Concept-based learning is introduced, and curricular links and clinical competencies are examined. Students learn and integrate study habits and test taking skills. Students commence their learning of the practice concepts of personal protection, quality and safety, the nursing process and ways of knowing as well as evidence-based practice. Prerequisite: Nursing 180.	

UNDERGRADUATE ACADEMIC OFFERINGS: NURSING

- 201 **Wellness in Self and Others (3)** Fall
The course emphasis is on caring for the whole person, to include oneself, in light of God's command to care for his creation. Concepts investigated include healthy eating, exercise, hygiene, safety, sleep, relationships, and spiritual well-being. Students analyze concepts further and apply them to individuals across the lifespan. The lab emphasis is on applying course concepts of healthy eating, exercise, hygiene, safety, sleep, relationships, and spiritual well-being to the self and to others in the nurse's care. Using appropriate clinical reasoning, activities include wellness assessments and interventions among self, other individuals, and groups. Prerequisites: enrollment in BSN program; Nursing 180, 190.
- 202 **Health Promotion in Community (4)** Spring
Continuing the emphasis on caring for the whole person in light of God's command to care for his creation, students conduct a concept analysis of health promotion across the lifespan and within specific vulnerable populations. Students discriminate influences from the environment as well as the role of infection control, inflammation, glucose metabolism, and skin integrity in maintaining health. Students integrate the concepts of stress management, maladaptive behaviors, and disaster preparedness as part of health promotion in community. Concepts will be applied in three hours of lab time each week. Prerequisites: enrollment in BSN program; Nursing 201. Corequisite: Nursing 212.
- 203 **Chronic Illness Dynamics (4)** Fall
The course extends the concepts of health and wellness of Nursing 201 and 202. Students deconstruct new concepts that include hydration, mobility, homeostasis in hormonal, neuro, and thermal regulation, gas exchange, glucose regulation, and elimination. Students analyze hemodynamics and the role of nursing care of patients as well as the management of chronic pain. Students learn aspects of integrated care planning. Includes two-hour lab each week. Prerequisites: enrollment in BSN program; Nursing 180, 190, 201, 202. Corequisites: Nursing 213, 310.
- 204 **Dimensions of Predictable Health Conditions (4)** Spring
In the course students analyze concepts common to predictable health conditions and outcomes. The study of reproductive health care and the childbirth experience, fetal development, and genetics are included. Students integrate care coordination and related therapeutic procedures to the predictable health conditions studied. Aspects of creational development are emphasized. Includes two-hour lab each week. Prerequisites: enrollment in BSN program; Nursing 180, 190, 201, 202, 203, 212, 213. Corequisites: Nursing 214, 237.
- 207 **Professionalism in Nursing Practice (2)** Fall
This course focuses on concepts of professionalism in nursing practice to include confidentiality, health information security, and patient rights. The concept of professionalism is deconstructed. Additional concepts include formal and informal professional relationships, interdisciplinary interactions, communication and collaboration among individuals, groups, as well as patients and their families. Students are introduced the processes of grief, dying, and death. Included are interrelationships among legal and ethical directives in health care. Through reflection, student's self-awareness as part of God's creational structure and their personal response is constructed. Prerequisites: Nursing 180, 190. Corequisite: Nursing 201.
- 208 **Pharmacology in Nursing Practice I (1)** Spring
This is part one of a three-part course that focuses on foundational pharmacological concepts that include drug categories, pharmacokinetics, expected actions and untoward outcomes. Discussions include methods to understand mathematical calculations, pharmacological abbreviations, and administration techniques. Students differentiate principles of ethical indications, legal precautions, and administrative responsibility. Students are introduced to the nursing processes invoked for the differentiation and management of pain. Prerequisite: math competency requirement met.
- 212 **Health Promotion in Community (Clinical) (3)** Spring
Clinical experiences in community settings introduce students to competencies applicable to the course concepts as well as opportunities to implement their competencies in professionalism, and transcultural nursing practice. Students will perform selected, applicable nursing skills. Prerequisite: enrollment in BSN program. Corequisite: Nursing 202. Graded on a pass/fail basis.
- 213 **Chronic Illness Dynamics (Clinical) (4)** Fall
Clinical experiences include caring for patients with chronic illness across the lifespan in a variety of practice settings. Previously learned nursing practice competencies will be reinforced. Students apply additional, selected, applicable nursing skills. Prerequisites: enrollment in BSN program; Nursing 201, 202, 208, 212. Corequisites: Nursing 203, 218. Graded on a pass/fail basis.
- 214 **Dimensions of Predictable Health Conditions (Clinical) (4)** Spring
Clinical experiences include application of nursing concepts studied in Nursing 204. The student will focus on caring for patients across the lifespan who have health conditions with predictable courses and outcomes. It provides opportunities for continuing development of clinical competency in the performance of selected, increasingly complex nursing skills. The students demonstrate knowledge of standards of nursing practice, professionalism, and transcultural nursing practice. Prerequisites: enrollment in BSN program; Nursing 180, 190, 201, 202, 203, 212, 213. Corequisites: Nursing 204, 237. Graded on a pass/fail basis.
- 217 **Standards of Nursing Practice (3)** Spring
The focus of the course is to introduce the student to concepts relevant to standards in nursing practice, while integrating knowledge from

Nursing 207. Students analyze the ethical standards of nursing ethical as well as a variety of other professional standards. Students discuss informed consent, clinical judgement, errors and variances, and reporting responsibilities. Students are introduced to common healthcare resources, technology and informatics in health care, and distinction of nursing practice among different practice settings. Prerequisites: Nursing 180, 190, 207. Corequisite: Nursing 202.

- 218 **Pharmacology in Nursing Practice II (1)**..... Fall
This is part two of a three-part course that augments Nursing 208 content. The course focus is on in-depth systems-based disease specific pharmacological therapeutics. Students identify and translate mechanisms of action, potential interactions, and contraindications. Additionally, students learn specific responsibilities in administering central access and parenteral therapies. Students integrate the nurse's responsibilities in documentation of pharmacological interventions. Prerequisite: Nursing 208. Corequisite: Nursing 203.
- 228 **Pharmacology in Nursing Practice III (1)**Spring
This is part three of a three-part course. The course introduces total parental nutrition, transfusions, interventional pharmacology, and pharmacogenomics. Students synthesize disease specific pharmacological therapies and incorporate aspects of applicable patient education outcomes. The course reinforces and expounds on the content from Nursing 208 and 218. Prerequisites: Nursing 208, 218. Corequisite: Nursing 204.
- 237 **Healthcare Systems and Nursing Practice (2)**Spring
In this course the students discuss healthcare organization and systems, health policy and other applicable influences of law in health care, the economics of health care to include compensation and reimbursement. Students reflect on maintaining the integrity of their role as Christian nurses while meeting the expectations of employing organizations. Prerequisites: Nursing 180, 190, 207, 217, 310. Corequisite: Nursing 204.
- 300 **Healthcare Ethics II (1)**Spring
This course builds upon the groundwork provided in Nursing 200 (Healthcare Ethics I) wherein ethical issues were analyzed and considered in light of current ethical theories as well as a Reformed framework. Nursing ethics inquiry continues across the lifespan with ethics pertinent to psychiatric/mental health, care of elders, community/public health, and issues in end-of-life care. Ethics in professional Christian nursing practice will be emphasized. Prerequisite: Nursing 200.
- 301 **Care of Acute and Complex Patients (4)** Fall
Course under development.
- 302 **Nursing Practice Practicum Seminar (2)**Spring
Course under development.
- 310 **Faith and Cultural Aspects in Health Care (3)**..... Fall
Students will engage in an introductory study of culture and its influence on behavior. Specific cross-cultural issues that affect health care delivery are discussed. Students will consider the worldviews of modern cultures and the implications for Christian discipleship; define health and illness as Christian individuals and part of the community as a whole; and comprehend traditional and alternative health care practices, incorporating religious beliefs, practices, and rituals. A phenomenological assessment is applied to the populations studied. Prerequisites: enrollment in BSN program or junior standing; permission of instructor. [Cross-listed: CORE 275]
- 311 **Care of Acute and Complex Patients (Clinical) (4)** Fall
Course under development.
- 312 **Nursing Practice Practicum (4)**..... Spring
Course under development.
- 317 **Leadership in Nursing Practice (3)** Spring
Course under development.
- 320 **Foundations of Nursing Theory (2)** Fall
Foundation concepts and nursing theories are explored as they apply to professional nursing practice. Nursing philosophies, theories, and historical influences are examined. Nursing philosophies and theories will be explored for their consistency/inconsistency with a Christian view of nursing. Prerequisite: enrollment in BSN program; or permission of instructor.
- 325 **Health Assessment (3)**..... Fall
The knowledge and skills for professional assessment and health promotion across the lifespan are covered along with related physiologic concepts. Students will develop skills related to comprehensive health assessment of the individual client which will be used as the basis for decision making and intervention. Theory and laboratory practice provide guidance in assessing physical, psychological, sociocultural and faith dimensions of the individual. Two lecture hours and one laboratory period of three hours per week. Prerequisites: enrollment in BSN program; evidence of valid R.N. license to practice in Iowa; or permission of instructor.

UNDERGRADUATE ACADEMIC OFFERINGS: NURSING

- 330 **Research and Scientific Inquiry (3)**.....Spring
The research process is introduced. A basic overview of research design, evidence-based practice and research utilization is presented. Students critique professional literature. Students develop an evidence based practice project that provides for application of research principles to nursing practice. Prerequisites: enrollment in BSN program; Nursing 320; or permission of instructor.
- 351 **Family, Community, and Public Health I (3)**..... Fall
This course focuses on the analysis of the family within the context of community-oriented nursing practice utilizing public health nursing and community health nursing strategies. It utilizes the study of the promotion of health along with the primary, secondary, and tertiary prevention of health problems of a population. The course focus is on the family as the client with nursing care of individuals, families and groups. The clinical component focuses upon utilizing a community-based nursing approach to health care delivery in the home setting. Two lecture hours per week and forty-five clinical hours per semester. Nursing 351 and Nursing 352 cannot be taken concurrently without special permission from the nursing department. Prerequisites: senior status in BSN nursing program; evidence of valid R.N. license to practice in Iowa.
- 352 **Family, Community, and Public Health II (4)**.....Spring
Concepts and theories of public and community health and relational influences are addressed. Students will incorporate knowledge of nursing research, process, and decision-making in assessing the community as the client; explore epidemiology, community empowerment, and community-nursing partnering for the health of the community; and collaborate with members of other disciplines and with consumers in planning for community health when applied to the community setting. The clinical experience emphasizes community based service learning within the context of a Christian perspective in professional nursing practice. Opportunities are provided to actively participate in various community settings and areas of service. Two lecture hours per week and ninety clinical hours per semester. Nursing 351 and Nursing 352 cannot be taken concurrently without special permission from the nursing department. Prerequisites: enrollment in BSN program; evidence of valid R.N. license to practice in Iowa.
- 371 **Practicum in Nursing (3)**..... Fall, Spring
An intensive clinical practicum in which the student will manage a client workload with all of its duties and responsibilities with the guidance of a professional nursing mentor. Students will work in a local area health care system, with an emphasis on learning while serving. Prerequisite: permission of instructor.
- 390 **Professional Practice Development in Society (3)**.....Spring
This capstone course concentrates discussion of Christian nursing practice within a broader perspective of a Reformed Christian worldview. It examines conflicting worldviews, prominent theoretical frameworks used to explain and guide professional nursing practice, and the integration of Christian caring while performing the various roles of the professional nurse. Students develop their individual philosophical perspective of nursing practice. The ability to conceptualize issues, apply critical thinking, theoretical reflection, and serviceable insight to political, economic, and psychosocial issues and trends affecting nursing and health care is facilitated. Prerequisites: CORE 200; enrollment in BSN program; or permission of instructor. [Cross-listed: CORE 317]

Courses Offered by St. Luke's

- 240 **Professional Development IV (1 credit, Offered by St. Luke's)**
This course is the fourth in a series of four professional development courses. Nursing 240 builds on the concepts of nursing roles, regulatory guidelines, communication, evidenced-based practice, critical thinking, leadership, management, and cultural sensitivity introduced in Nursing 110, 220, and 230-Professional Development I, II, and III, respectively. This course focuses on current issues in nursing, advanced communication skills, clinical decision, and cultural competency.
- 245 **Advanced Nursing Care (9 credits, Offered by St. Luke's)**
This fourth-level course focuses on the care of individuals experiencing oxygenation, circulation, protective mechanism, metabolic and oncological alterations, and traumatic injury. Nursing 245 builds on the concepts of the prerequisite courses including: professional development, pharmacology, foundations of nursing care, maternal-child, psychiatric, pediatric, geriatric, and select medical-surgical nursing. Prerequisite for Nursing 246.
- 246 **Transition to Practice (2 credits, Offered by St. Luke's)**
This fourth level course is the final nursing course of the ASN curriculum. Nursing 246 includes summative review of nursing theory and practice aimed at facilitating the transition from student to novice nurse generalist. The course includes a clinical preceptorship with a registered nurse in clinical practice.

Philosophy

General Major— CORE 200; Philosophy 301, 302, 303, 304, 309; five elective courses in philosophy; electives may include Engineering 390 and/or one course from Political Science 310 or 312.

General Minor— CORE 200; five elective courses in philosophy.

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- 202 **Logic (3)**.....Fall Even
An introduction to the study of logic, both deductive and inductive, focusing on its systematic, philosophical, and historical development.
- 206 **Aesthetics (3)**Spring
A study of the aesthetic dimension of creation, the nature and qualifying function of artistic activity, and artifacts, and an introduction to general aesthetic theory and its history. Prerequisite: CORE 200. [Cross-listed: CORE 316]
- 281- **Service-Learning (1-3)**.....Fall, Spring, Summer
283 See page 120, Individual Studies
- 301 **Ancient Philosophy: The Dawn of Western Thought (3)**Fall Odd
A study of the pagan roots of the thought patterns that shape our contemporary world. Designed for students interested in the philosophical and historical origins of our modern scientific culture. Readings in primary sources and a paper.
- 302 **Medieval Philosophy: Medieval Roots of Modern and Contemporary Thought (3)**.....Spring Even
A study of the medieval thought patterns that shaped our contemporary world. Designed for students interested in the history of philosophy, theology, and science. Readings in primary sources and a paper.
- 303 **History of Modern Philosophy (3)**Fall Even
A survey of philosophical problems and movements in the Western world from the end of the 15th century to the middle of the 19th century. Readings in primary sources.
- 304 **History of Contemporary Philosophy (3)**.....Spring Odd
A survey of philosophical problems and movements in the Western world from the middle of the 19th century to the present. Readings mainly in primary sources.
- 309 **History of Christian Philosophy (3)**.....Spring Odd
An analysis of the origin and development of Christian philosophy since the Reformation, in the context of Western thought. Prerequisite: CORE 200. Philosophy majors are advised to complete the history of philosophy sequence before taking Philosophy 309.
- 310 **Systematics of Christian Philosophy (3)**Spring Even
In-depth study of selected topics in the systematic philosophy of 20th century Christian philosophers. Specific attention will usually be given to the conceptions of such people as Dooyeweerd, Stoker, Vollenhoven and/or those who follow in their line. Prerequisite: CORE 200.
- 320 **Place, Grace, and Humans in Community (3)**.....Fall Odd
A study of the philosophical foundations of social relationships. Possible topics explored include the relationship between groups of people and their physical environment, the possibility of understanding people from different cultures than our own, and whether we can hold other communities to the standards of our own communities. Prerequisite: CORE 200. [Cross-listed: Community Development 320]
- 333 **Philosophy of the Environment (3)**.....Fall Even
A historical and systematic study of the structure and normed character of the various relationships between human beings and their environment. Prerequisites: CORE 200; junior or senior standing. [Cross-listed: Environmental Studies 333]
- 341- **Special Topics (3)**Occasional
348 Each of these courses is designed to be a special interest course utilizing individual instructor strengths, interests, and competencies. Each topic will be concerned with material not usually treated to any great extent in regularly scheduled courses.
- 350 **Faith, Emotions, and Being Human (3)**Fall Even
A survey of different non-Christian views about the nature, place, and task of man, and a study of the main themes of a Christian theory of man. Prerequisite: CORE 200. Open to juniors and seniors in all disciplines. [Cross-listed: CORE 326]
- 391- **Individual Studies (1-3)**Fall, Spring, Summer
393 See page 120, Individual Studies

Physics

General Major– Physics 201, 202, 203, 305, 325, 326, 331, 337; Chemistry 109 or 111; Computer Science 115; Mathematics 152, 153, 201, 204; three courses from (but not more than one 200-level mathematics course) Chemistry 333, Computer Science 215, Engineering 202, Mathematics 203, 209, 212, 215 and 216, 304, 311, 315, Physics 206, 393.

General Minor– Physics 201, 202, 203; one course from Physics 325, 326, 331, 337. (Note: Mathematics 152, 153 are pre or corequisites for Physics 201, 202, 203; Mathematics 201, 204 are prerequisites for Physics 325, 326, 337; Chemistry 109 or 111 is a prerequisite for Physics 331.)

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 86-99, Teacher Preparation Program.

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| 127 | Introduction to the Physics of Light (1)Occasional
An introduction to light, optics, wave interference, wave-particle duality, and special relativity. Algebra, geometry, and trigonometry will be used extensively. Historical progress in theories of light will be used to illustrate our understanding of how the creation works. The course will meet for a two hour lab block for one half of the semester, with approximately half of the time being devoted to lab/studio work. There will be approximately one assignment per week and a final exam. |
| 201 | Introductory Physics I (4)Spring
An introduction to the study of the physical aspect of reality for students intending to continue in the physical sciences and engineering. Linear and rotational kinematics and dynamics, statics, and gravitation will be covered. Three lectures and one laboratory period per week. Pre or corequisite: Mathematics 152. |
| 202 | Introductory Physics II (4) Fall
Continuation of Physics 201. Topics covered include fluid, oscillations, waves, heat and thermodynamics, and electricity. Three lectures and one laboratory per week. Prerequisite: Physics 201. Pre or corequisite: Mathematics 153. |
| 203 | Introductory Physics III (4)Spring Odd
Continuation of Physics 202. Topics covered include magnetism, Maxwell's equations, optics, quantum physics, and topics in modern physics. Three lectures and one laboratory per week. Prerequisite: Physics 202. |
| 206 | Linear Circuits and Electronics (4)Spring
Assumes a prerequisite knowledge of DC electrical circuits, including the definitions of electrical quantities, circuit elements (sources, resistors, capacitors, inductors), understanding of Kirchhoff's laws and basic concepts in AC circuits such as frequency and phase. Topics in this course include: general linear circuit analysis including Norton's and Thevenin's theorems; superposition; nodal and loop analysis; natural and forced responses in RLC circuits; and sinusoidal steady state analysis. The course also gives introductions to operational amplifier circuits, single stage BJT transistor circuits, and steady-state balanced 3-phase power calculations. The lab includes a formal design project. Prerequisite: Engineering 117 or Physics 202 or Physics 216. Corequisite: Mathematics 204. [Cross-listed: Engineering 220] |
| 215 | General Physics I (4) Fall
An introduction to the study of the physical aspect of reality. Topics covered include mechanics, kinetic theory, heat, and thermodynamics. Three lectures and one laboratory per week. |
| 216 | General Physics II (4)Spring
Continuation of Physics 215. Waves, sound, light, electricity and magnetism, and topics in modern physics, e.g., quantum theory, relativity, physics of the atomic nucleus. Three lectures and one laboratory period per week. Prerequisite: Physics 215. |
| 281-
283 | Service-Learning (1-3)Fall, Spring, Summer
See page 120, Individual Studies |
| 305 | Perspectives in Physical Science (3)Fall Even
Historical, philosophical, and theological perspectives on the physical sciences are discussed and developed. The historical and contemporary roles of Christianity and other influential forces in science are considered. Prominent positions in the philosophy of science are examined. Aspects of the complex interactions between Christian faith and the physical sciences are discussed. Prerequisites: CORE 200; completion of the Core Program natural science requirement with a physical science course (Astronomy, Chemistry, Physics, or CORE 220-229). [Cross-listed: Chemistry 305, CORE 315] |
| 325 | Classical Mechanics (4)Fall Even
Lagrangian and Hamiltonian dynamics, general rigid body motion, theory of vibrations and waves, planetary motion, and chaos are studied. Prerequisites: Physics 202; Mathematics 201, 204. |

- 326 **Electromagnetic Theory (4)**Spring Even
Review of vector calculus; divergence, curl, Gauss' and Stoke's theorems; electro- and magneto-statics; polarization; boundary conditions; Laplace and Poisson equations; magnetic vector potential; energy; Maxwell's equations for time varying fields; wave propagation; and Poynting's theorem. Prerequisites: Physics 203; Mathematics 201, 204. [Cross-listed: Engineering 326]
- 331 **Thermodynamics and Statistical Mechanics (3)**Spring Even
The study of heat, the laws of thermodynamics, thermodynamic generating functions, Maxwell's relations, kinetic theory, partition functions, and classical and quantum statistics. Three lectures per week. Prerequisites: Chemistry 109 or 111; Mathematics 152, 153; Physics 201, 202, 203. [Cross-listed: Chemistry 331]
- 337 **Modern Physics (4)**Fall Odd
Developments in modern physics: special relativity, atomic nature of matter and electricity, wave and particle aspects of electrons and light, quantum theory and applications to the study of atomic and molecular structure, condensed matter physics, particle and nuclear physics. Three lectures and one laboratory period per week. Prerequisites: Physics 203; Mathematics 201, 204.
- 341- **Special Topics (3)**Occasional
348 These courses cover areas in physics not already discussed in other courses. They are special interest courses offered on the basis of student demand and instructor background and availability. The prerequisite(s) will depend on the topics covered.
- 391- **Individual Studies (1-3)**Fall, Spring, Summer
393 See page 120, Individual Studies

Political Science

General Major– Political Science 201, 202, 210, 214, 245 or 333, 310 or 312, 319, 370; Political Science 322 or Criminal Justice 323; Political Science 373 or 393; Statistics 131. A preapproved off-campus program can substitute for Political Science 373 or 393.

General Minors–

Political Science: Political Science 201, 202, 210, 310 or 312, 333, 370; one from Criminal Justice 305, Economics 321, Political Science 373, Sociology 216.

International Politics: Political Science 201, 210, 312, 370; Economics 321 or Theology 331; one course from History 225, History 319, Political Science 319 or an off-campus international program pre-approved by department. [Note necessary prerequisites for non-departmental courses.]

Public Policy and Administration: Political Science 201, 202, 214, 245, 333; one from Agriculture 290, Communication 228, Criminal Justice 203, Economics 315, Political Science 373, Sociology 216, depending on vocational goals/interests. [Note necessary prerequisites for non-departmental courses.]

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 86-99, Teacher Preparation Program.

- 201 **Introduction to Politics (3)**Spring
An introduction to the political dimension of life from a biblically-oriented perspective. Laying the foundation for political thought and practice, the course will examine scripture, models of how the church relates to culture, and examples of Christian engagement with the political world. It will also provide a brief survey of each of the fields of political science and raise practical questions about political involvement. [Cross-listed: CORE 262]
- 202 **American National Politics (3)**Fall
A general introduction to the American political process—its foundations, external influences, institutions, political actors, and policymaking. [Cross-listed: CORE 264]
- 210 **International Relations (3)**Fall
An introduction to the contemporary relations among states with a consideration of the issues of war and peace, international organizations, law, integration, political economy, interdependence, and relations among the superpowers.
- 214 **State and Local Politics (3)**Spring Even
Provides a basic introduction to the political process at the state and municipal level, examining the role of the individual citizen, various groups, and governmental institutions. Attention is given to the special policy needs at the state and community level, their links with the federal government, and the particular character of local politics.

- 245 **Introduction to Public Administration (3)**.....Fall Odd
Provides an introduction to the interdisciplinary field of Public Administration. Subjects to be considered include the role of the public service in society, public service values and ethics, accountability and political control of the public service, the budgetary process, organizational forms in government, human resources, principles of public management, and new forms of delivering government services.
- 281- **Service-Learning (1-3)**.....Fall, Spring, Summer
283 See page 120, Individual Studies
- 310 **Ancient and Medieval Political Thought (3)**.....Fall Even
This course will examine the major ideas and trends in political thought from ancient times through the medieval period up to the early modern era. Philosophers to be studied include Plato, Aristotle, Augustine, Aquinas, Protestant reformers and Machiavelli. Relevance to the politics of our time will be included.
- 312 **Modern Political Thought (3)**.....Fall Odd
Major ideas and trends in political thought from the early modern era of the 1600s to the present will be examined. The first portion of the course will be a survey of major political philosophers. This will set the stage for understanding modern ideologies (populism, libertarianism, conservatism, liberalism, totalitarianism, and other -isms).
- 319 **Comparative Politics (3)**.....Spring Odd
This course will introduce the field of comparative politics. Nation-states will be compared to one another and to the United States. We will cover a range of topics including history, ethnic groups, political parties, and government structures. The diversity of nations and norms of human government will be examined from a Christian perspective. The course will focus on a specific region or continent of the world. Specific geographic focus to be announced.
- 322 **American Constitutional Law (4)**.....Spring
This course focuses on the American Constitution as interpreted by the Supreme Court. Through analysis of landmark cases, this course will study both historical and recent developments in constitutional law with the goal of gaining deeper insight into the way our system works and the reasons for the freedoms we hold dear. Prerequisite: Political Science 202; junior standing; or permission of instructor. [Cross-listed: Criminal Justice 325]
- 333 **Public Policy (3)**.....Spring
Provides a general introduction to the public policy process in the United States, including an exploration of the socioeconomic and cultural context, the defining characteristics of the political system, and various phases in the policy process. Special attention is given to selected policy issues such as energy and the environment, criminal justice, poverty, health care, and immigration.
- 341- **Special Topics (3)**.....Occasional
348 Each of these courses is designed to be of special interest and value to students utilizing strengths and skills of individual instructors. Each topic is concerned with material not normally treated in depth in regularly scheduled courses.
- 370 **Global Security Issues (3)**.....Spring Odd
This seminar course examines the challenges facing world security in the twenty-first century, including arms proliferation, ecological threats, economic globalization, ethnic conflict, resource scarcity, political economy, and human rights.
- 373 **Field Experience in Politics (3)**.....Fall, Spring
Students complete a limited field experience in a politics-related area. The experience is aimed at providing exposure to the type of activities in which political science graduates are likely to be involved as professionals. Three hours of course credit is to be based on the completion of 8 - 10 hours on the site per week plus one hour of work determined in consultation with the supervising member of the political science department for 14 weeks. Deadline for application for the spring semester is November 1; deadline for the fall and summer semester is April 1. Prerequisites: political science minor or major; junior or senior standing; approval of the department.
- 391- **Individual Studies (1-3)**.....Fall, Spring, Summer
393 See page 120, Individual Studies

Professional-Technical Education

Professional-Technical (Pro-Tech) Education offers associate of science degrees that equip Christians for lifelong service as operators and managers in skilled fields. The holistic curriculum develops technical skills, knowledge, and attitudes needed to serve God effectively in industry and all parts of life.

Pro-Tech Internship Program Internships are a vital part of Pro-Tech programs and provide opportunities to explore and identify a specific area of calling and develop advanced competencies in an off-campus workplace environment. Application for admission to the Pro-Tech Internship Program is required. The processes and standards to be admitted to and continue in the internship program are described in the internship syllabus. Applicants who do not meet standards will be rejected from the internship program. Admitted students who do not continue to meet standards will be suspended or removed from the internship program.

Agriculture: AGOP 101, 112, 117, 201, 202, 211, 212, 213, 221, 251, 252; TECH 113 or 123, 263, 271, 272, 273, 274, 275, 283.
Farm Operations and Management:

Manufacturing Technology: MFG 101, 112, 114, 117, 201, 202, 211, 212, 213, 251, 252, 253; TECH 113 or 123, 263, 271, 272, 273, 274, 275, 283.

See the "Academic Program" section for the Core Program requirements for the A.S. degree (page 24).

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- AGOP 101 Introduction to Farm Operations and Management (4)** Fall
 A foundations course that introduces students to a framework for obediently understanding and responding to the Lord's call to work effectively for His kingdom in the field of farm operations and management. Uses tours, career planning projects, and industry discussions to develop an understanding of the opportunities available and competencies needed to serve in modern agriculture. Uses real life experiences around equipment and farm activities to develop a safe work ethic and an understanding of situational safety.
- AGOP 112 Farm Maintenance and Repair (2)**Spring
 Equips students to maintain and repair various agriculture implements. Develops skill in the interpretation and use of owner's manuals. Includes the use of hand and power tools following best practices.
- AGOP 117 Agriculture Electrical and Plumbing Construction (2)**..... Fall
 Introduces the student to electrical safety, basic wiring methods and materials, and basic electric circuits. Develops wiring skills using trainers that facilitate the construction of actual circuits. Introduces the student to basic plumbing construction design, methods, and materials as they relate to farm applications such as dairy milking systems, crop chemical and fertilizer sprayers, and product handling equipment. Uses lab activities to develop skills in cutting, assembling, and threading both plastic and steel pipe.
- AGOP 201 Animal Husbandry (3)**Spring
 History, management, physiology, breeding, lactation, feeding, health, and products of beef cattle, dairy cows, swine, poultry, and other species as they relate to humans and the creation.
- AGOP 202 Animal Nutrition (3)**..... Fall
 Nutritional principles, digestive systems, composition and nutritional characteristics of common feedstuffs, ration formulation and recommended feeding programs for farm animals. Prerequisite: AGOP 201.
- AGOP 211 Principles of Agronomy (3)** Fall
 An introduction to the principles of crop production, including classification, soil-plant interrelationships and growth process in response to the creation. With discussions, field trips, and lectures, students will be introduced to how agriculture both influences and is influenced by human cultural development, how humankind's understanding of stewardship influences creation care, and how plants serve as sources of food, fiber, fuel, and fascination.
- AGOP 212 Fundamentals of Soil Science (3)**Spring
 An introduction to soil formation, classification, physical properties, water, organic matter, pH, and fertility with applications to common soil management goals. An application of humanity's call to work and keep the Lord's creation is integral to the course. Prerequisite: AGOP 211.
- AGOP 213 Integrated Pest Management (3)**.....Spring
 Covers various methods of pest control and their alternatives. Growth habits and identification of common weeds, insects, and diseases will be reviewed as well as the calibration and operation of broadcast and band applicators. Includes current topics such as the development of herbicide resistance. Prerequisite: AGOP 212.
- AGOP 221 Precision Agriculture (2)**Spring
 Introduces the framework for understanding global positioning systems and related components. Topics include precision farming, positioning systems, yield monitoring, GIS systems, and variable rate technologies.
- AGOP 251 Farm Business Management (3)**..... Fall
 Current principles and practices of farm management. Topics include current agricultural policy, goal setting, planning, organization of the farm business, systems management, record keeping, budgeting, balance sheets, income statements, cash flow statements, investment analysis, tax planning, and risk analysis.

- AGOP 252 Commodity Marketing and Agriculture Sales (2)**..... Summer
Introduction to the commodity futures markets, futures contracts, forward contracts, and risk management, as related to crop and livestock sales. Foundational business skills such as cash flow planning projections are also covered. Examines principles of sales and transactions common to the agricultural sector regarding inputs such as seed, fertilizer, feed, chemicals, and services. Includes steps of the sales process and well as the study of different personality styles as they function in the sales person-customer relationship.
- MFG 101 Introduction to Manufacturing (4)** Fall
A foundations course that introduces students to a framework for obediently understanding and responding to the Lord's call to work for his kingdom in the field of manufacturing. Examines the key elements of product development from the concept through design to production including just-in-time manufacturing principles and supply-chain management. Strong emphasis will be provided on manufacturing safety, quality and continuous improvements, manufacturing processes and production, and manufacturing maintenance awareness. Uses tours, activities, experiences, and industry discussions to develop an understanding of the opportunities available and responsibilities and competencies needed to serve effectively in manufacturing. This course is among the first courses in the logical sequence of manufacturing courses, which prepares students for their first internship experience. Additionally, the course content and topics support the Manufacturing Skills Standards Consortium (MSSC) curriculum, an internationally recognized manufacturing certification credential. Thus preparing students to take the MSSC Safety, Quality, Production, and Maintenance certifications test, which are the four modules required for the Certified Production Technician (CPT) certification.
- MFG 112 Introduction to Computer Aided Engineering and Design (1)**..... Fall
The design studio experience introduces concepts of graphical communication for engineers and develops basic 2-D and 3-D design skills with the use of a solid modeling software package. The course meets for one design studio per week. [Cross-listed: Engineering 112]
- MFG 114 Dimensioning, Tolerancing, Measurement, and Inspection (2)** Fall
Develops and applies size tolerancing, geometric dimensioning, thread and fastener specifications, detail and assembly drawings, weldments, external references, bill of materials and standardized drawing formats, engineering parts inspection, and reverse engineering processes.
- MFG 117 Computer-Aided Manufacturing (2)**.....Spring
This course introduces and applies concepts of plan reading and graphical communication for manufacturing and develops 2-D and 3-D design skills with use of Mastercam and related software. Includes principles of parametric design, functional assemblies, and development of a complete set of production drawings created using 3D drawing environments. The course will also explore the principles of CAM-CNC production in manufacturing. Uses tours, activities, experiences, and industry discussions to develop an understanding of the opportunities available and responsibilities and competencies needed to serve effectively in the manufacturing domain of the Kingdom of God. Prerequisite: Manufacturing 112.
- MFG 201 Materials and Metallurgy (2)**..... Fall
Analysis of the behavior and characteristics of metals and other materials used in manufacturing including polymers, ceramics and composites: their structure, physical and mechanical properties.
- MFG 202 Machining, Metalworking, and Tooling (3)**..... Fall
Develops competencies in the operation of lathes, milling machines, borers, grinders, and drill presses. Applies plan reading concepts to develop sketches, perform layouts, and generate specifications for where and how to machine metal. Includes tool and material selection and use of precision measuring devices to produce quality parts on CNC lathe and milling machines. Prerequisite: Manufacturing 112, 201.
- MFG 211 Electricity and Electronics (3)**Spring
An introduction to electronic components, their diagrams, wiring methods and electrical safety. Voltage sources, current properties, resistance characteristics, and their relationships using Ohm's law, Watt's law, and Kirchoff's laws will be studied. Provides hands-on experience in breadboarding circuits, reading schematics, soldering, and operation of test equipment to measure voltage, current, and resistance. The practical aspects of using meters, oscilloscopes, and function generators to evaluate and troubleshoot circuits are practiced.
- MFG 212 Programming, Instrumentation and Data Acquisition (3)**..... Fall
An introduction to programming and the principles of interfacing with a microcomputer for data acquisition using devices such as temperature probes, proximity sensors, pressure transducers, relays, analog-to-digital converters, digital-to-analog converters, timers, counters, and the software to operate these devices. Prerequisite: Manufacturing 211.
- MFG 213 Controls and Automation (3)**.....Spring
Applies instrumentation and data acquisition principles to control and automate manufacturing processes. Prerequisite: Manufacturing 212.

- MFG 251 Production Management and Lean Systems (2)** Summer
Application of lean manufacturing concepts and lean tools in structuring industrial manufacturing processes in efforts to minimize manufacturing costs, enhance workplace safety, improve work flow, eliminate process variations, and to shorten products delivery time. Develops concepts related to rapid prototyping and enables critical thinking in new product development, process building, sustainability, and innovation theories. Ethical implications to workers and the community in design consideration are investigated.
- MFG 252 Industrial Assembly (2)** Spring
Principles of the applications of industrial assembly and additive manufacturing. Advantages of using additive manufacturing over traditional subtractive manufacturing processes are studied. Prerequisite: Manufacturing 251.
- MFG 253 Quality and Continuous Improvement (3)** Spring
Application of quality principles to process improvement and reduction of variation. Application of statistical techniques and concepts used in quality control; acceptance sampling; quality cost; reliability; applications of computers, software and other quality control tools to quality improvement. Prerequisite: Manufacturing 251.
- TECH 113 Introductory Welding (1)** Spring
An introduction to the principles of metal joining and cutting techniques. Students will evaluate methods and techniques for metal joining and cutting. The course will cover principles and practice of shielded metal arc welding (SMAW), gas metal arc welding (GMAW), oxyacetylene welding, and cutting. Curriculum aligns to federally endorsed national standards for production workers.
- TECH 123 Intermediate Welding (1)** Spring
Students will learn and utilize intermediate techniques for metal joining and cutting. The course will cover intermediate level concepts, skills, and practices of shielded metal arc welding (SMAW), gas metal arc welding (GMAW), oxyacetylene welding and cutting. The course will focus on project-based learning activities Prerequisite: TECH 113; or permission of instructor.
- TECH 263 Professional Networking for Internship (1)** Spring
Students will develop and apply professional networking competencies in the process of securing their summer internship. Example activities include exploring and identifying internship sites, networking with company representatives to identify possible options, applying to and interviewing for positions, and completing pre-employment paperwork.
- TECH 268 Serving Christ's Kingdom through Pro-Tech (2)** Spring
A capstone course that develops and applies a Reformational framework for Christian service in technical vocations, within agriculture and manufacturing fields, and explores the relationship of these fields to other areas of Western society. The framework is applied to current cultural topics such as the role, appropriateness, and impacts of technology and automation. The course explores dualisms that tend to separate faith and work and applies a Reformed perspective to questions such as safety and risk, professional responsibility and authority, social and economic structures, and career choice. [Cross-listed: CORE 268]
- TECH 271 Pro-Tech Internship (1.5)** Fall
An off-campus experience that provides Pro-Tech students with opportunities to work with a mentor and apply knowledge, principles, skills, and attitudes gained in the program's courses in a workplace environment. Prerequisite: admission to the Pro-Tech Internship Program.
- TECH 272 Pro-Tech Internship (3)** Spring
An off-campus experience that provides Pro-Tech students with opportunities to work with a mentor and apply knowledge, principles, skills, and attitudes gained in the program's courses in a workplace environment. Prerequisite: TECH 271; admission to the Pro-Tech Internship Program.
- TECH 273 Pro-Tech Internship (2)** Summer
An off-campus experience that provides Pro-Tech students with opportunities to work with a mentor and apply knowledge, principles, skills, and attitudes gained in the program's courses in a workplace environment. Prerequisite: TECH 272; admission to the Pro-Tech Internship Program.
- TECH 274 Pro-Tech Internship (2-3)** Fall
An off-campus experience that provides Pro-Tech students with opportunities to work with a mentor and apply knowledge, principles, skills, and attitudes gained in the program's courses in a workplace environment. Prerequisite: TECH 273; admission to the Pro-Tech Internship Program.
- TECH 275 Pro-Tech Internship (3)** Spring
An off-campus experience that provides Pro-Tech students with opportunities to work with a mentor and apply knowledge, principles, skills, and attitudes gained in the program's courses in a workplace environment. Prerequisite: TECH 274; admission to the Pro-Tech Internship Program.

- TECH 283 Internship Closeout (1)** Fall
Students will reflect on, evaluate, and share outcomes from their summer internships. Example activities include written reflections, exit interviews, discussions with peers, and presentations to summarize their activities and learning.

Psychology

General Major— Psychology 201, 230, 366, 384; Statistics 131; seven psychology electives (20 or more credits), at least two of which must be at the 300-level.

The department encourages students to either plan an off-campus semester or double major in another program (e.g., Spanish, Business, Communication, Criminal Justice, Youth Ministry).

General Minor— Psychology 201, 204, 224; four psychology electives (12 or more credits).

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 86-99, Teacher Preparation Program.

- 201 Introduction to Psychology (3)** Fall, Spring
Explaining human behavior is a wonderfully complex task, and this course introduces students to the scientific study of topics such as memory, personality, development, social influence, disorders, and others. Along the way, we will use a bio-psycho-social (spiritual) model to frame our study and will compare a biblical perspective on being human to several historical perspectives in psychology.
- 204 Lifespan Development (3)**.....Fall, Spring, Summer
This course studies the growth and maturation of persons throughout the entire lifespan, including examination of physical, cognitive, personality, social changes, faith development, and other developmental tasks. This course will also focus on evaluating the theoretical issues and descriptive information portraying the growth of an individual from conception through late adulthood. Students will develop a biblically-informed vision of who we are as image-bearers of God and what it means to be humans living in God's creation. [Cross-listed: CORE 251]
- 210 The Social Psychology of Persons (3)** Fall, Spring
We influence and are influenced by culture, social structures, groups, personality, family, and the media, just to name a few. Studying the situational and personal/interpretive factors that influence an individual's social behavior can reveal new insights about the grace and sin at work in our relationships and social situations. Utilizing a biblical perspective on the social psychology of persons, this class will explore how students can function as faithful Christians within all of these situations. [Cross-listed: CORE 252, Sociology 210]
- 218 Biopsychology (3)**..... Fall
This course is an introduction to the physiological/biological processes in human psychology. Primary emphasis will be on relating brain and nervous system functioning with basic psychological processes, such as motivation, emotion, sleeping, learning, memory, and abnormal behavior. In addition, several topical areas will be addressed, including alcohol dependence, drug addiction, homosexuality, physiology of sexual differences, and a Christian perspective on the mind-body-soul dilemma. Prerequisite: Psychology 201 or Biology 203.
- 224 Psychopathology (3)**..... Fall, Spring
This course examines the development and symptoms of emotional and behavioral problems. Topics covered include the clinical assessment of affective disorders, schizophrenia, personality disorders, psychosomatic disorders, anxiety disorders, and the process of adjustment to stress. Attention will be given to personality, social, and religious factors, and their role in mental health. Prerequisite: Psychology 201 or 204 or 210.
- 230 Research Methods (3)**.....Spring
This course introduces students to the research process, including formulation of hypotheses, design, interpretation, and communication of results. The course will include a review of statistical procedures with an emphasis on selection and interpretation of analyses and an introduction to computer data analysis with R. Methods of research are discussed from a reformed, Christian perspective. Students complete research proposals. Prerequisite: sophomore standing or above. Pre or corequisite: Statistics 131. [Cross-listed: Statistics 230]
- 260 Ethics (1)**Fall Odd
This seminar course considers the American Psychological Association's published "Ethical Principles of Psychology" and the practical application of those standards in real-life situations. Students also wrestle with how those standards fit with Christian ethics and the complexities of practice in a diverse social context. Prerequisite: Psychology 201.
- 281- Service-Learning (1-3)**Fall, Spring, Summer
283 See page 120, Individual Studies

- 341- **Special Topics (3)**Occasional
 348 Each of these courses is designed to be a special interest course utilizing individual instructor strengths and interests. Each topic will be concerned with material not usually treated to any great extent in regularly scheduled courses.
- 362 **Cognitive Psychology (4)**Spring
 A survey of contemporary research and theory on human cognition and higher mental functioning approached from an information-processing perspective. Topics include attention, concept formation, perception, language, mental representation, and problem solving. Students will be challenged to critique both theory and research methods from a reformed, Christian perspective. Two lectures and a two-hour lab each week. Prerequisite: junior or senior standing.
- 366 **Senior Research Project (4)** Fall
 This highly interactive course develops students' collaborative, cognitive, and communication skills as they design, conduct, and present psychological research as a service to campus or community groups. Students also consider tensions that face Christian psychologists as they conduct research and enter the profession of psychology. Weekly labs involve opportunities to practice new learning in a just-in-time approach that prepares students for the next step in their own research. Satisfies Core Program writing-intensive requirement. Prerequisite: Psychology 230.
- 370 **Helping Skills (3)**Spring
 Class focus is on developing the foundational interpersonal and helping skills required for psychology students interested in human service practice. Topics include active listening, attending, problem-solving, challenging, brainstorming, and group counseling skills. The course is organized around an experiential learning model and students are given feedback on their helping skills. Prerequisites: Psychology 224; junior or senior psychology major or minor.
- 371- **Field Experience in Psychology (3)** Fall, Spring
 372 The field experience is designed to provide a sample of the type of activities in which psychologists and other human service professionals are engaged; it is not intended to develop competence to the level of a beginning practitioner. Requirements include the completion of eight hours on site per week plus one hour of consultation with psychology department supervisor. Deadline for application for the spring semester is November 1; deadline for the fall (and summer) semester is April 1. Prerequisites: Psychology 224; junior or senior standing; approval of department. Psychology 370 strongly recommended
- 374 **Counseling Theories (3)**Fall Even
 This introductory course in counseling theory emphasizes the dynamics of the counseling process and characteristics of the counseling relationship in the light of biblical directives concerning human nature, purpose, responsibility, and conduct. Prerequisites: Psychology 224; junior or senior standing.
- 376 **Personality Theories (3)** Fall Even
 A comparative analysis of the major theoretical perspectives on personality in the field of psychology, including psychoanalytic, trait, learning, cognitive, humanistic, and existential views. Significant topic areas include disorders of personality, the principles and methods used to assess personality, and a reformed anthropological model of personality. Prerequisites: Psychology 224; junior or senior standing.
- 378 **Psychometrics (2)**Fall Odd
 Course covers basic psychometric theories, principles of test construction, and a survey of common personality, achievement, and intelligence tests. Not open to non-majors. Prerequisite: Psychology 224.
- 382 **Health Psychology (3)**Spring
 Survey course examines the contributions of psychology to the understanding, prevention, and treatment of a variety of health concerns. Topics include stress, pain management, cancer, eating disorders, exercise, and health promotion. Prerequisites: Psychology 218 or 224; junior or senior standing; or permission of instructor.
- 384 **History of Psychology and Worldview (3)** Fall
 A brief study of the historical development of psychological theories from the ancient world to the present, with extended treatment given to major contemporary movements or perspectives in psychology (such as psychoanalysis, behaviorism, and humanism) and to recent attempts by Christians to "integrate" theology and psychology. Prerequisites: CORE 200; Psychology 201; senior standing. [Cross-listed: CORE 324]
- 391- **Individual Studies (1-3)**Fall, Spring, Summer
 393 See page 120, Individual Studies

Social Work

The social work program is built upon a strong liberal arts base and foundational courses in the social sciences. The program is designed to equip students with the requisite knowledge and skills for beginning social work practice. The program is fully accredited by the Council on Social Work

Education (1986). Admission to the social work program and completion of the major will require a formal two-part application process. Graduates will receive the bachelor of social work degree.

Admission to the Program Application for admission to the program is required and should be filed during the spring semester of the sophomore year prior to spring break. Forms may be obtained from the chairperson of the Social Work Program Committee. The Social Work Program Committee reviews completed application forms, and admission to the program is based on the following criteria:

- A minimum cumulative GPA of 2.20; completion of at least 39 credits; completion of or current enrollment in CORE 120 or English 100, CORE 110, 140, 150, 160, 180, 200, 212, CORE 266 or Political Science 201, Psychology 201, Sociology 201, Statistics 131, Social Work 200, 215, 216, and 225.
- A written statement of personal interest that indicates an ability to communicate effectively and a commitment to social work as a vocation.
- A letter of reference indicating acceptable physical and psychological health.
- Enrollment in practice courses is limited to students who have been admitted to the program.

Upon review of the application, the committee will take one of the following actions:

- Accepted-meets all criteria
- Accepted conditionally-some criteria require further attention.
- Denied-some or all criteria inadequate.

The student will receive written notice of status.

Admission to the Professional Semester The second part of the application process is an application to participate in the professional semester that includes an intensive field work experience. This application should be filed during the spring semester of the junior year, prior to spring break. Forms may be obtained from the chairperson of the Social Work Program Committee. The Social Work Program Committee will review the application, and admission to the professional semester will be based on the student's meeting the following criteria:

- A minimum cumulative GPA of 2.50.
- Completion of the required courses as listed under the major.
- Senior standing (anticipated).
- Professional letter of reference indicating acceptable physical, intellectual, and psychological suitability.
- A written statement that demonstrates acceptable communication skills and a mature and knowledgeable interest in social work.
- An interview that demonstrates the student's suitability to social work in terms of interest, knowledge, maturity, personality, and physical and mental health.

Upon review of the application, the committee will take one of the following actions:

- Accepted-meets all criteria.
- Accepted conditionally-some criteria require further attention.
- Denied-some or all criteria inadequate.

The student will receive written notice of status.

The Social Work Program Committee reserves the right to refuse admission or continuation in the program, to any student who does not maintain a 2.50 GPA, or who, in the judgment of the committee, has physical, mental, or personality difficulties or limitations that would be detrimental to the student and/or to the welfare of potential clients. Academic credit for life experience or previous work experience shall not be given, in whole or in part, in lieu of the field practicum or of the courses in the professional foundation areas.

Course Requirements, B.S.W. - Social Work Program

Core Program (see page 25) Social work majors must complete all of the Core Program requirements for students seeking a bachelor's degree, with the following guidelines:

- Social work majors must take CORE 212 as part of the natural science requirement.
- Statistics 131 (Elementary Statistics) meets the quantitative reasoning requirement.
- Spanish is the recommended foreign language.

Major (54 credits)

Social Work 200 (3)	.....	Freshman
Social Work 215 (3)	.....	Freshman or Sophomore
Social Work 216 (3)	.....	Freshman or Sophomore
Social Work 225 (3)	.....	Sophomore
Social Work 307 (3)	.....	Junior
Social Work 308 (3)	.....	Junior
Social Work 310 (3)	.....	Junior
Social Work 311 (3)	.....	Junior
Social Work 313 (3)	.....	Junior
Social Work 309 (3)	.....	Senior
Social Work 312 (3)	.....	Senior
Social Work 315 (3)	.....	Senior

Social Work 325 (3)	Senior
Social Work 374* (12)	Senior

*Social Work 374 (Field Work Experience) must be taken at Dordt University to receive graduation credit toward the social work major.

200	Introduction to Social Work (3)	Fall
	A survey of the major fields of social work practice and of the problems with which they deal. It will include agency field visits. Overarching this survey will be a concern for the Christian's individual and collective responsibility for the health and welfare of his neighbor and community.	
215	Vulnerable Populations (3)	Spring
	A historical and contemporary analysis of groups considered vulnerable by economic and social standards in American society. Causes, consequences, and implications for society are examined from a biblical view of humankind with an emphasis on social work practice. [Cross-listed: CORE 256, Sociology 215]	
216	Diversity and Inequality (3)	Fall, Summer
	Students examine the historical and contemporary factors related to diversity and inequality in North America and increase their appreciation for the contributions of diverse groups in culturally-pluralistic societies. The course assumes that human diversity is created good and explores how to discern that goodness after the Fall. Students assess their own biases in light of course material and increase their sensitivity to diversity. [Cross-listed: CORE 276, Criminal Justice 216, Sociology 216]	
225	Family System and Practice (3)	Spring
	This course examines the family system from sociological and practice-oriented viewpoints. Students will evaluate contemporary and traditional views of the family within a Christian perspective. Students will also be introduced to historical and contemporary child and family welfare practice and policy. [Cross-listed: Sociology 225]	
281- 283	Service-Learning (1-3)	Fall, Spring, Summer
	See page 120, Individual Studies	
307	Methods of Social Science Research (3)	Fall
	An introduction to the research process as applied to the study of problems/issues in social science. Problem selection, research design, measurement, methods of observation and data collection, data analysis and interpretation, and report writing will be emphasized. A module on microcomputer utilization and the application of descriptive statistics is presented for application in student projects. Prerequisites: Statistics 131; junior or senior standing. [Cross-listed: Sociology 307, Statistics 307]	
308	Human Behavior in Social Environment I (3)	Spring
	Through multidisciplinary, theoretical, and conceptual frameworks of human behavior in the social environment, students will explore bio-psycho-social-spiritual factors in human development from prenatal experience through adolescence. Students will develop assessment and intervention skills that focus on the interrelationship between uniquely created people and individual, family, small groups, and society. Students and instructor will address issues of ethnicity, race, diversity, cultural background, gender, sexuality, social class, and age as pertinent to the understanding of human behavior. Prerequisites: CORE 212; Psychology 201; Sociology 201.	
309	Human Behavior in Social Environment II (3)	Fall
	Through multidisciplinary, theoretical, and conceptual frameworks of human behavior in the social environment, students will explore bio-psycho-social-spiritual factors in human development from young adulthood through end of life. Students will develop assessment and intervention skills that focus on the interrelationship between uniquely created people and individual, family, small groups, and society. Students and instructor will address issues of ethnicity, race, diversity, cultural background, gender, sexuality, social class, and age as pertinent to the understanding of human behavior. Prerequisites: Social Work 308.	
310	Fundamentals of Social Work Practice (3)	Fall
	The focus is on acquiring the foundation interpersonal and problem-solving skills for social work practice. Development of self-awareness and self-knowledge related to growth in skills and a beginning identity as a social work professional will also be emphasized. The course is organized around experiential learning models. Prerequisites: Social Work 200, 215; English 100 or CORE 120; CORE 110.	
311	Practice Methods I: Social Work with Groups (3)	Spring
	An overview of general systems theory as a basis for developing an integrated social work practice model. Special emphasis will be given to the development of problem-solving skills related to groups found within social work practice with a variety of intervention strategies presented. Prerequisite: Social Work 310.	

- 312 **Practice Methods II: Social Work with Organizations and Communities (3)** Fall
This course explores social change and organizational theories along with an emphasis on practice at the organizational and community level. A continuation of Social Work 310 and 311 with an emphasis on practice at the agency and community levels. Prerequisites: Social Work 310, 311.
- 313 **Church, State, and Social Welfare (3)** Spring
This course examines the question of which societal sphere is responsible for protecting vulnerable people. The course will follow the historical path of development of the modern social welfare institution, with a particular focus on the Progressive Era and the birth of social work and public administration. Students will examine structure, development, and contemporary response through discussion, research and varied readings on the biblical call to care for our neighbor, charity, social justice, and the normative role of the state and the church. Students will wrestle with this fundamental question: "How must I, acting alone, or in combination with others, behave towards vulnerable people?" Prerequisite: CORE 200. [Cross-listed: CORE 313]
- 315 **Social Welfare Policy (3)** Fall
Students work within a social welfare policy analysis framework that allows their critique and development of recommendations for current and past social welfare policies. The course explores both faith-based and secular attempts at addressing social problems through policy. Two special features within this are the analysis of welfare reform within the United States and political advocacy.
- 325 **Integrative Seminar in Social Work (3)** Spring
An opportunity for students to reflect on and integrate the academic and field work experience with a special emphasis on ethical and value dilemmas confronted by the student in the field. (Open only to senior social work majors who have completed the professional semester admission process.) Corequisite: Social Work 374.
- 374 **Field Work Experience (12)** Spring
The field work course is designed to provide the student with the opportunity to apply classroom knowledge, principles, and skills in a community agency under the supervision of a professional social worker. (Open only to senior social work majors who have completed the professional semester admission process.) Corequisite: Social Work 325.
- 391- **Individual Studies (1-3)** Fall, Spring, Summer
393 See page 120, Individual Studies

Sociology

General Minor- Sociology 201, 210, 215, 216; two courses from Criminal Justice 101, Philosophy 320, Social Work 200, Sociology 202, 225, 305, 307, Statistics 131.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 86-99, Teacher Preparation Program.

- 201 **Sociology and Social Justice (3)** Fall, Spring, Summer
Includes an examination of culture, socialization, social structure, group behavior, and inequalities (of class, race, and gender), as well as identifying and analyzing the pressing problems in our world that requires an understanding of social change that occurs through collective action and social movements. Through an exploration of predominant sociological theories, students are able to contrast those with a biblical worldview that challenges them to articulate how a reformed Christian understanding of creation (and norms) sin, redemption, and consummation may be used to positively affect social interaction, organizations, and institutions. [Cross-listed: CORE 261]
- 202 **Criminology (3)** Fall
A theory-based course that studies crime causation, typologies of crime, and crime control. It looks at both historical and modern theories, including those that look to individual, social, and structural causes. It also broadly analyzes the guardianship and enforcement functions of the criminal justice system. Students will be able to identify criminology theories in modern media and engage in theory-building exercises. Prerequisite: sophomore standing. [Cross-listed: Criminal Justice 304]
- 210 **The Social Psychology of Persons (3)** Fall, Spring
We influence and are influenced by culture, social structures, groups, personality, family, and the media, just to name a few. Studying the situational and personal/interpretive factors that influence an individual's social behavior can reveal new insights about the grace and sin at work in our relationships and social situations. Utilizing a biblical perspective on the social psychology of persons, this class will explore how students can function as faithful Christians within all of these situations. [Cross-listed: CORE 252, Psychology 210]
- 215 **Vulnerable Populations (3)** Spring
A historical and contemporary analysis of groups considered vulnerable by economic and social standards in American society. Causes, consequences, and implications for society are examined from a biblical view of humankind with an emphasis on social work practice. [Cross-listed: CORE 256, Social Work 215]

- 216 **Diversity and Inequality (3)**.....Fall, Summer
Students examine the historical and contemporary factors related to diversity and inequality in North America and increase their appreciation for the contributions of diverse groups in culturally-pluralistic societies. The course assumes that human diversity is created good and explores how to discern that goodness after the Fall. Students assess their own biases in light of course material and increase their sensitivity to diversity. [Cross-listed: CORE 276, Criminal Justice 216, Social Work 216]
- 225 **Family System and Practice (3)**.....Spring
This course examines the family system from sociological and practice-oriented viewpoints. Students will evaluate contemporary and traditional views of the family within a Christian perspective. Students will also be introduced to historical and contemporary child and family welfare practice and policy. [Cross-listed: Social Work 225]
- 281- **Service-Learning (1-3)**.....Fall, Spring, Summer
283 See page 120, Individual Studies
- 305 **Victimology and Family Violence (3)**.....Spring Odd
The victimology section will look at the various harms suffered due to crime, how victims interact with various agencies and players, public reaction to victims, the victims' rights movement, and how to better serve the victims of crime through our criminal justice system. Students will also identify and describe the problem, measure its true dimensions, and review evidence and hypotheses of victimologists. In the Family Violence portion, theories on family violence will be analyzed, the consequences of family victimization will be considered, as well as how to recognize child abuse and understand the dynamics of partner violence. Students will analyze legal and enforcement responses, consider how institutional responses can prevent or lessen revictimization, and look to how a Restorative Justice model can alleviate some of the harms of victimization. Prerequisite: junior standing; or permission of instructor. [Cross-listed: Criminal Justice 305]
- 307 **Methods of Social Science Research (3)**..... Fall
An introduction to the research process as applied to the study of problems/issues in social science. Problem selection, research design, measurement, methods of observation and data collection, data analysis and interpretation, and report writing will be emphasized. A module on microcomputer utilization and the application of descriptive statistics is presented for application in student projects. Prerequisites: Statistics 131; junior or senior standing. [Cross-listed: Social Work 307, Statistics 307]
- 341- **Special Topics (3)**Occasional
348 Each of these courses is designed to be a special interest course utilizing individual instructor strengths and interests. Each topic will be concerned with material not usually treated to any great extent in regularly scheduled courses.
- 391- **Individual Studies (1-3)**Fall, Spring, Summer
393 See page 120, Individual Studies

Spanish

- General Major–** Spanish 201, 202, 204, 300, 302, 304; Spanish 206 or CORE 281; Spanish 301 or 301L; Linguistics 201; one course from Spanish 102, 207, 208, 341-348, 393; four semesters of Spanish conversation 251-258. Six credits in study-abroad courses are required.
- General Minor–** Spanish 201, 202, 204; Spanish 300 or 302; Spanish 301 or 301L; Spanish 206 or CORE 281; Linguistics 201; three semesters of Spanish conversation 251-258. Three credits in study-abroad courses are required.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 86-99, Teacher Preparation Program.

- 101 **Elementary Spanish I (4)** Fall
An introductory study of the language and culture of Spanish-speaking people. Emphasis on the acquisition of oral and written language skills in a communicative context combined with the study of Hispanic cultures. The course includes a weekly session with advanced students or native speakers to practice oral skills.
- 102 **Elementary Spanish II (3)**.....Spring
Continuation of Spanish 101. The course includes a weekly session with advanced students or native speakers to practice oral skills. Prerequisite: Spanish 101 or our on-line placement test score of 296-360.
- 201 **Intermediate Spanish I (3)**..... Fall
An intermediate course that continues the study of the language in a communicative context with considerable emphasis upon precision and expansion of linguistic skills. Some attention given to the nature of language. Emphasis on the development of cultural understanding and sensitivity, with a study of the people's values and beliefs as expressed in their economic, political, and religious systems. Comparison of this culture with our culture in the light of the cultural mandate. Prerequisite: Spanish 102 or our on-line placement test score of 361-439.

UNDERGRADUATE ACADEMIC OFFERINGS: SPANISH

- 202 **Intermediate Spanish II (3)**Spring
This is a second intermediate Spanish course that provides students with continued opportunities to strengthen their language skills, to develop their cultural competency, and to reinforce their knowledge and use of grammatical structures. Its focus is on communicating in meaningful contexts to further develop and consolidate students' speaking, listening, reading, and writing skills. This course will be conducted in Spanish. Prerequisite: Spanish 201 or our on-line placement test score of 440 and up.
- 204 **Literary and Cultural Readings (3)** Fall
Designed to strengthen speaking, listening, reading and writing skills in Spanish through a variety of readings, to develop the ability to value diverse communities and an appreciation for Hispanic cultures and literature. This course will be conducted in Spanish. Prerequisite: Spanish 201 or 202 or equivalent; or permission of instructor.
- 206 **Hispanic Cultures and Civilizations (3)**Spring
Designed to give insight into Hispanic cultures and civilizations, and a more global understanding of the issues and challenges that the Spanish-speaking world has faced and is facing. Listening and speaking abilities will be enhanced through classroom activities. The course will be conducted in Spanish. Prerequisite: Spanish 201 or 202 or equivalent; or permission of instructor.
- 207 **World Literature I (3)**Fall Odd
See English 207 for course information. [Cross-listed: English 207]
- 208 **World Literature II (3)**Spring Even
See English 208 for course information. [Cross-listed: Dutch 208, English 208, French 208]
- 251- **Conversation (1)** Fall, Spring
258 Designed to give the student practice in listening and speaking. The content of the courses will be altered each year. The class will meet two times each week. (Graded on a pass/no record basis.) Prerequisite: Spanish 201; or permission of instructor.
- 281- **Service-Learning (1-3)**Fall, Spring, Summer
283 See page 120, Individual Studies
- 300 **Advanced Spanish Grammar and Composition I (3)**Fall Odd
This course includes an in-depth study and practice of Spanish grammar and a rigorous component in writing. Emphasis is given to more complex grammatical structures that tend to present difficulties for learners of Spanish as a foreign or second language. The course will be conducted in Spanish. Prerequisite: Spanish 201, 202 or equivalent; permission of instructor.
- 301 **Applied Linguistics and Spanish Phonology (3)**Fall Odd
An in-depth study of specific areas of linguistics, such as neurolinguistics (brain and language), psycholinguistics (language acquisition), computational linguistics (computer processing and language), and language change (how language has changed and still changes). One-third of the course is geared at the special interests of the students. Spanish students will study the phonology (the study of sound patterns) of Spanish and learn how to teach Spanish pronunciation. Prerequisites: Linguistics 201; Spanish 102 or 201.
- 301L **Spanish Phonology (1)**Fall Odd
Students will study the phonology (the study of sound patterns) of Spanish and learn how to teach Spanish pronunciation. This one-credit lab is meant for students who are also registered for Linguistics 301 because they want to graduate with both a TESL and a Spanish education endorsement. Prerequisites: Linguistics 201; Spanish 102 or 201. Corequisite: Linguistics 301.
- 302 **Advanced Spanish Grammar and Composition II (3)**Fall Even
Continues an in-depth study and practice of Spanish grammar and a rigorous component in writing. The course will be conducted in Spanish. Prerequisite: Spanish 201, 202 or equivalent; permission of instructor.
- 304 **Hispanic Literature (3)**Spring Even
An understanding and a historical introduction to Hispanic narrative, poetry, and drama. A study of each genre's origins, major developments, and figurative language will engage students in analytical exercises. An overview of periods, movements, significant authors, and literary currents in Spain and Latin America. This course will be conducted in Spanish. Prerequisites: Spanish 300 or 302.
- 341- **Special Topics (3)**Occasional
348 The topics for these courses will be chosen from areas of literature, advanced language studies, culture, or teaching methods. The offering of the course as well as the content will reflect student interest and need. Prerequisite: departmental approval.
- 391- **Individual Studies (1-3)**Fall, Spring, Summer
393 See page 120, Individual Studies

Statistics

General Major–	Computer Science 115; English 305; Mathematics 152, 153, 201, 203; Statistics 132, 201, 203, 210, 211, 212, 213, 215, 216, 220, 290, 371, 372.
Applied Statistics Minor–	Mathematics 152; Statistics 131 or 132, 201 or 202, 215, 216, 371; Computer Science 115 or English 305; one course from Statistics 230, 307, 371-374.

- 131 Introductory Statistics (4)** Fall, Spring
An introductory course in statistical techniques and methods and their application to a variety of fields. Topics include data analysis, design of experiments, and statistical inference including confidence intervals and hypothesis testing. Exposure to statistical software and a substantive student project are also part of this course. Prerequisite: an ACT mathematics score of 22 or higher or satisfactory completion of one course from Mathematics 100, 108, 115 or ALEKS score of 45 or higher.
- 132 Accelerated Introductory Statistics (2)** Spring
This course covers the same content and learning objectives as Statistics 131 but in half the time. This course, along with Statistics 202 and Statistics 203, also serves as preparation for Actuarial Exam SRM. Additionally this course, along with Statistics 202, Statistics 203, Statistics 220 and Statistics 352, serves as preparation for Actuarial Exam MAS I. Offered first half of spring semester. Credit will not be given for both Statistics 131 and 132. Prerequisite: Mathematics 152 or significant prior experience with statistics.
- 148 Introduction to Financial Mathematics (2)** Fall
This course covers topics in basic interest theory including interest, annuities, and amortization as well as basic concepts in derivatives markets including stocks, bonds, forwards, puts, calls, spreads, and hedges. Course content is taught using a guided discovery approach focusing on student conceptual understanding. The course also includes discussion of Christian perspectives on investments and risk management. This course, along with Statistics 218, also serves as preparation for Actuarial Exam FM/2. Offered first half of fall semester. Prerequisite: an ACT mathematics score of 22 or higher or satisfactory completion of one course from Mathematics 100, 108, 115; strong algebra skills. [Cross-listed: Mathematics 148]
- 201 Applied Statistical Models (2)** Spring
This course surveys multivariable design and statistical methods used across various disciplines and seen in peer-reviewed research. Topics include multiple and non-linear regression, general linear models, multivariable statistical models, and multifactor experimental design emphasis is on active-learning using group activities and projects, critiquing research, and statistical software. Offered second half of spring semester. Credit will not be given for Statistics 201 and 202. Prerequisite: Statistics 131 or 132.
- 202 Econometrics (3)** Spring
This course covers all of the topics in Statistics 201 and topics commonly used in economic applications of statistics: time series and forecasting, linear time series models, moving average, autoregressive and ARIMA models, data analysis and forecasting with time series models and forecasting errors. Meets at the same times as Statistics 201 plus two additional hours per week. This course, along with Statistics 132 and Statistics 203, also serves as preparation for Actuarial Exam SRM. Additionally this course, along with Statistics 132, Statistics 203, Statistics 220 and Statistics 352, serves as preparation for Actuarial Exam MAS I. Offered second half of spring semester. Credit will not be given for both Statistics 201 and 202. Prerequisite: Statistics 131 or 132. [Cross-listed: Economics 232]
- 203 Generalized Linear Models (2)** Fall Odd
This course covers simple linear regression and associated special topics, multiple linear regression, indicator variables, influence diagnostics, assumption analysis, selection of 'best subset', nonstandard regression models, logistic regression, and nonlinear regression models. This course, along with Statistics 132 and Statistics 202, also serves as preparation for Actuarial Exam SRM. Additionally this course, along with Statistics 132, Statistics 202, Statistics 220 and Statistics 352, serves as preparation for Actuarial Exam MAS I. Prerequisite: Statistics 201 or 202.
- 210 Experimental Design (2)** Fall Even
Principles, construction and analysis of experimental designs. Completely randomized, randomized complete block, Latin squares, Graeco Latin squares, factorial, and nested designs. Fixed and random effects, expected mean squares, multiple comparisons, and analysis of covariance. Prerequisite: Statistics 201 or 202.
- 211 Complex Data and Hierarchical Models (2)** Spring Even
A course which illustrates statistical modelling techniques for the class of datasets which have correlation between the observations including time series, hierarchical samples, complex survey samples, clusters, family structures, etc. The general linear model is expanded to the general estimating equations approach. Prerequisite: Statistics 201 or 202.
- 212 Statistical Programming in R (4)** Spring Odd
Data acquisition, cleaning, and management in R; use of regular expressions; functional and object-oriented programming; graphical, de-

scriptive, and inferential statistical methods; random number generation; Monte Carlo methods including resampling, randomization, and simulation. Prerequisite: Computer Science 115.

- 213 **Machine Learning/Modern Data Analysis Methods (2)**.....Spring Even
An introductory survey of modern machine learning. Machine learning is an active and growing field that would require many courses to cover completely. This course aims at the middle of the theoretical versus practical spectrum. We will learn the concepts behind several machine learning algorithms without going deeply into the mathematics and gain practical experience applying them. We will consider both pattern recognition and artificial intelligence perspectives. Prerequisites: Computer Science 115; Statistics 201 or 202.
- 215 **Introduction to Univariate Probability (2)**.....Spring Odd
An introduction to the theory and techniques of general probability and common univariate probability distributions. Topics include but are not limited to basic set theory, introductory probability rules (independence, combinatorials, conditionals, Bayes theorem, etc.), common univariate distributions (e.g., binomial and normal) and expected value/variance. This course, along with Statistics 216, also serves as preparation for Actuarial Exam P/1. Offered first half of the semester. Prerequisite: Mathematics 152. [Cross-listed: Mathematics 215]
- 216 **Introduction to Multivariate Probability (2)**.....Spring Odd
An introduction to multivariate probability distributions. Topics include but are not limited to joint probability density functions, conditional and marginal probability distributions, moment generating functions, covariance and correlations, transformations and linear combinations of independent random variables. This course, along with Statistics 215, also serves as preparation for Actuarial Exam P/1. Offered second half of the semester. Prerequisites: Mathematics 152; Statistics 215. [Cross-listed: Mathematics 216]
- 218 **Intermediate Financial Mathematics (2)**.....Fall
This course covers intermediate topics in financial mathematics including progressing annuities, force of interest, duration, convexity, immunization, swaps, forwards and other topics on Actuarial Exam FM/2 that are not covered in Statistics 148. This course, along with Statistics 132, also serves as preparation for Actuarial Exam FM/2. Offered second half of fall semester. Prerequisite: Statistics 148. Pre or corequisite: Mathematics 152. [Cross-listed: Mathematics 218]
- 220 **Mathematical Statistics (4)**.....Fall Odd
The theory of hypothesis testing and its applications. Power and uniformly most powerful tests. Categorical data and nonparametric methods. Bayesian vs. Frequentist methods. Other selected topics. This course, along with Statistics 132, Statistics 202, Statistics 203 and Statistics 352, serves as preparation for Actuarial Exam MAS I. Additionally this course, along with Statistics 290 and Statistics 353, serves as preparation for Actuarial Exam MAS II. Prerequisites: Mathematics 201; Statistics 216.
- 230 **Research Methods (3)**.....Spring
This course introduces students to the research process, including formulation of hypotheses, design, interpretation, and communication of results. The course will include a review of statistical procedures with an emphasis on selection and interpretation of analyses and an introduction to computer data analysis with R. Methods of research are discussed from a reformed, Christian perspective. Students complete research proposals. Prerequisite: sophomore standing or above. Pre or corequisite: Statistics 131. [Cross-listed: Psychology 230]
- 290 **Introduction to Data Science (4)**.....Spring Odd
Introduction to the field of data science and the workflow of a data scientist. Types of data (tabular, textual, sparse, structured, temporal, geospatial), basic data management and manipulation, simple summaries, and visualization. This course also serves as preparation for Actuarial Exam PA. Additionally this course, along with Statistics 220 and Statistics 353, serves as preparation for Actuarial Exam MAS II. Prerequisites: Computer Science 115; Statistics 201 or 202. [Cross-listed: Computer Science 290]
- 307 **Methods of Social Science Research (3)**.....Fall
An introduction to the research process as applied to the study of problems/issues in social science. Problem selection, research design, measurement, methods of observation and data collection, data analysis and interpretation, and report writing will be emphasized. A module on microcomputer utilization and the application of descriptive statistics is presented for application in student projects. Prerequisites: Statistics 131; junior or senior standing. [Cross-listed: Social Work 307, Sociology 307]
- 351 **Investment and Financial Markets (4)**.....Fall Even
This course covers the theoretical basis of actuarial models and the application of those models to insurance and other financial risks. This course also serves as preparation for Actuarial Exam IFM/3F. Prerequisites: Statistics 216, 218.
- 352 **Long Term Actuarial Mathematics (4)**.....Fall Odd
This course covers the theoretical basis of life contingent actuarial models and the application of those models to insurance and other financial risks. This course also serves as preparation for Actuarial Exam LTAM. Additionally this course, along with Statistics 132, Statistics 202, Statistics 203 and Statistics 220, serves as preparation for Actuarial Exam MAS. Prerequisites: Statistics 216, 218.
- 353 **Short Term Actuarial Models (4)**.....Spring Even
This course covers product-oriented information relating to short-term insurance (e.g., health, property, and liability) and the basics of pricing.

ing and reserving. This course also serves as preparation for Actuarial Exam STAM. Additionally this course, along with Statistics 220 and Statistics 290, serves as preparation for Actuarial Exam MAS II. Prerequisites: Statistics 216, 218.

- 371- **Data Analysis Internship (3)**Fall, Spring, Summer
 374 A semester-long research experience that involves a significant use of multivariable statistics in an applied research project. Students will identify and work with a primary faculty mentor to develop a project proposal prior to enrolling; students will also be supervised by a statistics professor. Part of the course will include an oral and written presentation of results. The course will be offered as needed and is run as an individual study. May be repeated for up to 12 credits. Permission of instructor required. Prerequisite: Statistics 201 or 202.
- 391- **Individual Studies (1-3)**Fall, Spring, Summer
 393 See page 120, Individual Studies

STEM

- 111 **Robotics for the K-12 STEM Educator (2)**Spring Even
 This course explores the field of robotics and a variety of multidisciplinary topics from science, mathematics, and technology necessary to understand the fundamentals of designing, building, and programming robots. Topics of focus include programming logic and problem-solving models. Prerequisite: Computer Science 115.
- 112 **STEM Field Experience (1)** Fall, Spring
 A 30-hour supervised field-based internship in a K-12 STEM classroom.

Theatre Arts

General Major– Foundation (common to all emphases): Theatre Arts 102, 103, 203, 365, 366, 371, 380, 382, 384, 386; one course from Theatre Arts 204, 207, 208, 307; one course from Theatre Arts 233, 234, 235, 236; two enrollments in HHP 014; a minimum of seven credits from Theatre Arts 001. Prerequisite for Theatre Arts 386 is junior status. Students should enroll in the course in the fall of their junior year. Theatre Arts majors are required to complete the theatre subsection of CORE 160.

Students must select one of the following emphases:

- Acting/Directing: Foundation; Theatre Arts 204, 205, 207, 208, 307; English 210, 312. Theatre Arts 390 recommended.
- Design and Technical Theatre: Foundation; Art 201, 202, 225; one course from Art 207, 208, 209, 210; Theatre Arts 233, 234, 235, 236. Individual study in design or technical theatre recommended.
- Drama Ministry: Foundation; Theatre Arts 262; Theology 231, 332, 351; Theology 254 or 331.
- Dramaturgy/Playwriting: Foundation; English 301 or 302; English 312; Philosophy 206; Theatre Arts 262; one course from Art 207, 208, 209, 210, English 333, History 280.
- Theatre Management: Foundation; Business Administration 201, 205, 206, 207; Communication 260; CORE 266 or Economics 202. Business Administration 100, English 305, and Theatre Arts 391-393 recommended.
- General Minor–** Theatre Arts 102, 103, 382; one course from Theatre Arts 204, 207, 208, 307; one course from Theatre Arts 233, 234, 235, 236; Theatre Arts 203 or 262; one course from English 312, Theatre Arts 365, 366; a minimum of four credits from Theatre Arts 001. Theatre Arts 371 recommended.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 86-99, Teacher Preparation Program.

- 001 **Theatre Practicum (1-3)** Fall, Spring
 Students apply for one to three hours of academic credit for work on a theatre production. Registration for credit is required in the semester in which the project is to be produced. In addition to rehearsal, performance, or technical work, regular meetings and some written work are required.
- 102 **Fundamentals of Acting (3)**Fall Odd
 This course introduces students to the fundamental principles of acting. They will gain knowledge and develop skills in character analysis, basic internal and external acting methods, characterization, listening, relaxation, concentration, and improvisation. May not be taken on a pass/fail basis.

UNDERGRADUATE ACADEMIC OFFERINGS: THEATRE ARTS

- 103 **Stagecraft (3)**..... Fall
An introduction to the theory and practice of stage lighting and set construction techniques, including introductory electrical and color theory.
- 203 **Scenic Design (3)**.....Spring Odd
An introduction to scenic design that includes design theory, design process, and the technical skills related to scenic design. May not be taken on a pass/fail basis. Prerequisite: Theatre Arts 103.
- 204 **Voice and Movement (1.5)**Spring Odd
In this course students apply voice, diction, ensemble, and movement fundamentals toward the development of clear stage speech and dialect creation, sensory awareness, ensemble performance, character movement, body control, and basic juggling and tumbling skills.
- 205 **Acting for the Camera (3)**.....Spring Odd
The basic techniques of acting for the camera and strategies for adapting stage-acting methods for the camera. Students will perform on-camera in class and have the opportunity to hone their craft through critical analysis of their recorded performances. Prerequisite: Theatre Arts 102; or permission of instructor.
- 207 **Improvisation for Theatre and Life (1.5)**Spring Odd
This class explores the history and techniques of improvisation from the renaissance through contemporary times. It challenges the student to grow in spontaneity and confidence in their creative capacities in all parts of life.
- 208 **Stage Combat (1.5)**.....Spring Even
An introduction to stage combat focusing on the technique for safely creating and performing stage violence. This course covers hand-to-hand combat and basic sword fighting methods for the stage.
- 233 **Sound Design and Technologies (1.5)**.....Spring Even
Students will explore the physics and technology of sound. We will develop a basic understanding of how sound works in our day to day lives, discuss the technologies and tools used to control sound, and develop an understanding of how we might use this knowledge to create artistic, theatrical experiences.
- 234 **Lighting Design and Technologies (1.5)**.....Spring Even
Students will explore lighting theory, and engage in lighting design practices for the theatre. The hands-on nature of the curriculum will enable students to feel comfortable with, and be employable in an introductory position in the field of lighting design.
- 235 **Makeup Design (1.5)**Fall Even
This course covers the materials, principles, and practices of makeup design and application for theatre and film.
- 236 **Costume Design (1.5)**.....Fall Even
The purpose of this course is to introduce the student to costume design. Students will learn the costume design process from the analysis of a script to the final color rendering. Students will gain a basic understanding of costume history, script analysis, design theory, and basic rendering skills.
- 262 **Educational Theatre in the Classroom and Beyond (3)**Fall Odd
An introduction to informal dramatics for the classroom, youth theatre programs, and other applications in fields such as youth ministry, social work, and psychology. Students interested in elementary, middle or high school teaching are encouraged to enroll. Emphasis is on dramatic activity requiring minimal equipment and facilities. Field experience required in area schools, churches, or after-school programs. Prerequisite: admission to the Teacher Preparation Program; or permission of instructor. [Cross-listed: Education 262]
- 281- **Service-Learning (1-3)**Fall, Spring, Summer
283 See page 120, Individual Studies
- 307 **Acting Styles (1.5)**Spring Even
An integration of body, mind, and voice techniques for the purpose of developing a way to conventionalized period acting. Students will research period styles, practice script analysis, learn characterization techniques, participate in physical and vocal acting exercises, and apply this work in stylistic scene and monologue work. Period/Styles covered in this course may include the following: Greek, Shakespearean, Comedy of Manners, Farce, etc.
- 341- **Special Topics (3)**Occasional
348 These courses are special-interest courses utilizing instructor strengths and student interests. Each topic will be concerned with material not usually treated to any great extent in regularly scheduled courses.
- 365 **Theatre History and Literature I: Greek through Neo-Classicism (3)**Spring Even
Students engage the literature of the theatre from Sophocles to Moliere as an introduction to the rise, decline, and rebirth of Western

drama, as well as some forms of Eastern drama. May not be taken on a pass/fail basis. Not recommended for freshman students. Satisfies Core Program writing-intensive requirement.

- 366 **Theatre History and Literature II: Restoration through Present Day (3)**Spring Odd
Students engage representative literature of the theatre from Behn to Pinter and Parks as they examine the birth of modernism, anti-realism, and various forms of postmodernism. May not be taken on a pass/fail basis. Not recommended for freshman students.
- 371 **Applied Theatre: Capstone Production Project (3)** Fall, Spring
The course content (directing, design, acting, technical theatre, producing, or playwriting) will be designed for each individual in consultation with a departmental supervisor. Work on the project will be done in two or three semesters with enrollment in the final semester. May not be taken on a pass/fail basis. Open only to majors and minors.
- 380 **Playwriting and Playscript Analysis (3)**.....Fall Even
This course provides basic instruction in writing dramatic scenes and a one-act play. It also provides advanced instruction in script analysis: theories, genre, style, methods of construction, and their implications for performance. Students will read what working playwrights say about their craft, read about and discuss the writing of plays of different styles, and workshop their script(s) in community.
- 382 **Directing (3)**Fall Odd
A course on the directing process. Students will gain training in script analysis and interpretation, conceptualization, blocking, and actor coaching – culminating in the direction of a short one-act play. May not be taken on a pass/fail basis. Prerequisites: Theatre Arts 102; junior or senior standing; or permission of instructor.
- 384 **Devised Theatre (3)**Spring Even
A study of the theory and practice of theatre and drama used for human reflection or to raise awareness and affect social change. Students will learn to apply the core principles of facilitating, scripting, and play-building to real world contexts. Topics of study will depend on the focus of the course in a particular semester. The course may culminate in an original, devised performance piece that could be toured in local communities. May be repeated but may not count as more than one three-credit course towards the major or minor.
- 386 **Professional Practices (1)** Fall
This course introduces theatre majors to such things as resume writing, portfolio creation, and interviewing and auditioning skills. Prerequisite: junior or senior standing.
- 391- **Individual Studies (1-3)**Fall, Spring, Summer
393 See page 120, Individual Studies

Theology

General Major– Foundation (common to all emphases): CORE 150; Theology 110, 111, 210, 221, 310, 361; one course from Theology 211, 212, 213, 214; one course from Theology 215, 216, 217.

Students must select one of the following emphases:

- Biblical Studies:** Foundation; three courses from Theology 211, 212, 213, 214, 215, 216, 217; Biblical Languages 111, 112 or 113, 114. Biblical Greek and Biblical Hebrew are each strongly recommended for Biblical Studies. See Biblical Languages for course offerings.
- Mission and Ministry:** Foundation; Theology 231; three courses from Theology 241, 254, 331, 332, 351, 352; three credits from Theology 281, 282, 283, 371.
- Theological Studies:** Foundation; Theology 321, 323, 324, 325; one theology course numbered 200 or above.
- Youth Ministry:** Foundation; Theology 231, 241, 254, 351, 352; Psychology 204 or 370; six credits from Theology 371, 372.

General Minors–

Theological Studies: Theology 111; Theology 110 or 210; four theology courses numbered 200 or above.

Admission to the Youth Ministries Program: Formal application for admission to the youth ministries program is required. Application should be made to the theology department at the end of the Discernment of Ministry (Theology 111) course, which should be taken in the freshman or sophomore year. Application will be based on the various statements developed in this course.

The following are requirements for admission to the youth ministry program:

- Completed application form
- Minimum GPA of 2.00 in all theology courses to date
- Students may apply to the youth ministry program after their first academic year and must apply before their final academic year.

Once each year the members of the department will discuss each student's fitness to continue in the youth ministry program. A majority of the department members must approve a student to graduate with a youth ministry major. If a student's initial application is not accepted, the student may take additional courses for the major and reapply after each semester or may appeal to the division dean to have three professors outside of the theology department evaluate his/her application and supporting materials.

Theology courses are open to all majors and especially serve emphases in the following majors: Agriculture, Business Administration, Community Development, Theatre Arts, and Worship Arts.

For descriptions of EDUCATION majors, minors, fields of specialization, and teaching endorsements, see pages 86-99, Teacher Preparation Program. For a description of the Worship Arts program, see page 155.

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| 110 | Biblical Studies Methods (3) Fall
This course introduces interpretive approaches and practices for reading the Bible using a Reformed hermeneutical method. Students will become familiar with major resources for biblical study, interpret a variety of Old Testament and New Testament texts, and discuss the manner in which the varied contexts (e.g., social, cultural, theological) of the biblical world and contemporary readers inform exegetical study. This is a foundational course in the theology program to develop skills in biblical studies and theological writing. Open to all students seeking to develop their reading, understanding, and application of Scripture. |
| 111 | Spiritual Formation (3) Spring
What does the Christian life of faith and discipleship look like? This course will explore the history and practice of the spiritual disciplines by studying the faith lives of important figures in the history of Christianity. The purpose of this exploration is to help students see how God is at work in the history of the church so they can begin to articulate their experience of God's work in their own lives. This is a foundational course in the theology program. It is open to any student interested in learning more about spirituality and discipleship. |
| 210 | Theological Methods (3) Fall
What are interpretive approaches and practices for studying theology from a Reformed perspective? In this course, themes for discussion include the doctrines of God, Christology, scripture, creation, fall, redemption, and eschatological consummation. Students will have an opportunity to study both the historical development of these theological topics, as well as their contemporary application. |
| 211 | Old Testament: Pentateuch (3) Fall, every fourth year
This course will introduce students to detailed study of the content, themes, and purposes of the Torah (Genesis, Exodus, Leviticus, Numbers, and Deuteronomy), as well as to the scholarly tools commonly used to interpret them. Students will practice close readings of portions of the Pentateuch and discuss the ways that the varied contexts in which these texts are read (e.g., canonical, theological) inform meaningful interpretation within the context of a historical-redemptive approach to scripture. |
| 212 | Old Testament: Prophets (3) Fall, every fourth year
This course will introduce students to detailed study of the content, themes, and purposes of the Prophetic books (Isaiah, Jeremiah, Ezekiel, Daniel, and the Book of the Twelve), as well as to the scholarly tools commonly used to interpret them. Students will practice close readings of portions of the Prophets and discuss the ways that the varied contexts in which these texts are read (e.g., canonical, theological) inform meaningful interpretation within the context of a historical-redemptive approach to scripture. |
| 213 | Old Testament: Wisdom and Writings (3) Fall, every fourth year
This course will introduce students to detailed study of the content, themes, and purposes of the Wisdom books and Writings (Job, Psalms, Proverbs, Song of Songs, Ruth, Ecclesiastes, Lamentations, and Esther), as well as to the scholarly tools commonly used to interpret them. Students will practice close readings of portions of these writings and discuss the ways that the varied contexts in which these texts are read (e.g., canonical, theological) inform meaningful interpretation within the context of a historical-redemptive approach to scripture. |
| 214 | Old Testament: Historical Books (3) Fall, every fourth year
This course will introduce students to detailed study of the content, themes, and purposes of the Historical Books (Joshua, Judges, 1-2 Samuel, 1-2 Kings, 1-2 Chronicles, Ezra, and Nehemiah; as well as 1-2 Maccabees), as well as to the scholarly tools commonly used to interpret them. Students will practice close readings of portions of these books and discuss the ways that the varied contexts in which these texts are read (e.g., canonical, theological) inform meaningful interpretation within the context of a historical-redemptive approach to scripture. |
| 215 | New Testament: Gospels (3) Spring, every third year
This course will introduce students to detailed study of the content, themes, and purposes of each of the four canonical Gospels, as well as to the scholarly tools commonly used to interpret them. Students will practice close readings of portions of the Gospels and discuss the |

ways that the varied contexts in which these texts are read (e.g., canonical, theological) inform meaningful interpretation within the context of a historical-redemptive approach to scripture.

- 216 **New Testament: Epistles (3)** Spring, every third year
This course will introduce students to detailed study of the content, themes, and purposes of Paul's letters (Romans, 1-2 Corinthians, Galatians, Ephesians, Philippians, Colossians, 1-2 Thessalonians, 1-2 Timothy, Titus, Philemon) and the General Epistles (Hebrews, James, 1-2 Peter, 1-2-3 John, Jude), as well as to the scholarly tools commonly used to interpret them. Students will practice close readings of portions of the letters and discuss the ways that the varied contexts in which these texts are read (e.g., canonical, theological) inform meaningful interpretation within the context of a historical-redemptive approach to scripture.
- 217 **New Testament: Acts, Revelation (3)** Spring, every third year
This course will introduce students to detailed study of the content, themes, and purposes of Acts and Revelation, as well as to the scholarly tools commonly used to interpret them. Students will practice close readings of portions of Acts and Revelation and discuss the ways that the varied contexts in which these texts are read (e.g., canonical, theological) inform meaningful interpretation within the context of a historical-redemptive approach to scripture.
- 221 **The Great Tradition (3)** Spring
A study of the Great tradition of God's people, that highlights the major creeds and confessions that the Church has written over the past two thousand years as it has responded to challenges and defined its understanding of the Christian faith with a view to faith today.
- 231 **Foundations of Mission and Ministry (3)** Spring
A study of the Bible's teaching about the mission of the people of God and how the Christian Church understands mission and ministry. The course also explores the contextualization of the gospel in the Western and global Church.
- 241 **Foundations of Worship (3)** Fall Even
A study of the Scriptural foundation for worship and of the components of worship. There will be a brief study of historic patterns of worship, leading to the preparation of liturgies and the practice of worship-leading skills. [Cross-listed: Worship Arts 241]
- 242 **Worship in Contemporary Context (3)** Fall Odd
This course engages the theological and cultural issues that shape contemporary worship practices of the church. By exploring diverse worship practices students will develop a deeper understanding of the relationship between Christian worship and culture. The focus on this course is to help students cultivate discernment as they lead worship in a variety of cultural contexts. [Cross-listed: Worship Arts 242]
- 254 **Teaching the Bible (3)** Fall Even
This course explores the Reformational approach to teaching the Bible. Its primary goal is to equip lay and professional ministry practitioners and teachers with the skill of preparing and presenting biblical content to diverse audiences. Interpretive attention will be given to the text of Scripture, the situation of the learner, the process of preparation, the art of presentation. The course will cover theological and pedagogical foundations as well as the practical content of teaching Bible. This course is relevant for those teaching in a local church context as well as for those developing curriculum to teach the Bible in a high school classroom setting. [Cross-listed: Education 261]
- 261 **Encountering the Land of Israel (3)** Summer Occasional
Travel on location in Israel for a two-week, transformative immersion course covering the land, culture, and story of the Bible. Biblical study takes on new meaning as you relate it directly to your surroundings through activities and experiences that engage all your senses. Assignments include readings and lectures on the history, culture, archaeology, and geography of Israel, all framed within a Reformational perspective on how to read the Bible well and how to engage important political and religious issues that continue today. [Cross-listed: CORE 287]
- 281- **Service-Learning (1-3)** Fall, Spring, Summer
283 See page 120, Individual Studies
- 310 **Christian Ethics (3)** Fall Even
What does it mean to pursue the good life and how do we so as faithful disciples of Christ? What do we owe to God, neighbor, stranger, and enemy? Answers to these questions are more difficult to come by than we might expect – or hope. We live in a world rife with sin, corruption, and moral disagreement. Even faithful Christians can arrive at profoundly different moral judgments about life in the church and the world. This course aims to equip students with theological and ethical tools that they can use to reflect critically on what it means to live faithfully in contemporary society. Prerequisite: CORE 200 or Theology 210.
- 321 **Modern and Contemporary Theology (3)** Fall Even
By surveying important theological trends from the Reformation to the present, students will critically engage major theological issues that shape Christian thought and life today. Prerequisite: CORE 200 or Theology 210.
- 323 **Christian Mind and Heart (3)** Spring Odd
In conversation with great thinkers of the past, we will discuss the biblical foundation for Reformed thinking, the responsibility of humans

to fulfill our mission as image-bearers in God's world, and the development of a Reformed world and life view for actual Christian thinking and living. Students will explore significant issues of Christian life through personal and group projects that engage particular aspects of their major studies or life vision. Prerequisite: CORE 200 or Theology 210. [Cross-listed: CORE 314]

- 324 **Theology of the Reformation (3)**Spring Even
This course focuses on Luther and Calvin against their historical and theological backgrounds in order to understand the foundation of Protestant theology and thought. By studying both their classical works and secondary sources, students will critically understand how the fundamental doctrines began to be shaped in the 16th century and how they developed in the centuries following. Theological method, spirituality, and culture of the Reformation theology will be discussed along with the landmark doctrines concerning Scripture, sin and grace, salvation, and church. Prerequisite: CORE 200 or Theology 210. [Cross-listed: CORE 318]
- 325 **Ancient and Medieval Theology (3)**Fall Odd
By surveying important theological trends from the ancient church to the Reformation, students will critically engage major theological issues that shape Christian thought and life today. Prerequisite: CORE 200 or Theology 210.
- 331 **Engaging World Religions (3)**Fall Odd
An exploration of how the major world religions function in human life. Major topics will include systems of religious belief and worldview, sacred literature, symbols, rituals, and practices. Students will explore diverse religious practices by bringing the biblical and theological perspective of the Reformed tradition into dialogue with different religious systems. The goal of this exploration is to use the tools of the Reformed tradition to gain a practical understanding of different religions in order to engage people of different faiths with the gospel. Theology 231 recommended.
- 332 **Engaging Mission and Ministry (3)**Spring Odd
An in-depth study of the contemporary issues that the Church faces in understanding and carrying out its mission and ministry in the 21st century and a global context. The course identifies issues such as contextualization and the relation of verbal proclamation to social involvement. It engages practical, biblical, and theological responses in mission and ministry at a personal and communal level. Prerequisite: Theology 231.
- 333 **Psalms, Hymns, and Spiritual Songs (3)**Spring Even
An overview of the role of music in worship, worship music repertoire, and information and skills needed to plan music for worship. [Cross-listed: Music 209, Worship Arts 333]
- 334 **Elements of Praxis in Worship (3)**Spring Odd
The focus on this course is to equip students with the practical insight needed to lead worship in a contemporary context. This includes learning how to use equipment, how to organize and lead a practice, cultivating a stage presence, how to develop excellent sound, and incorporating a diversity of instruments into worship. Prerequisite: Theology 241, 242. [Cross-listed: Worship Arts 334]
- 341- **Special Topics (3)**Occasional
348 These courses will cover a different topic each semester and each is designed to be a special interest course utilizing individual instructor strengths, interests, and competencies. Each course will cover a topic in theology not usually treated in-depth in regularly scheduled courses.
- 351 **Gospel, Church, and Culture (3)**Fall Odd
Study of a Reformed approach to ministry in the context of the congregation and contemporary culture. The course includes the study of a Reformed philosophy of ministry, the nature of the church, cultural dynamics that affect both ministry and the church, and the character of leadership that takes all these factors into account. Theology 231 recommended.
- 352 **Leadership and Discipleship (3)**Spring Even
This course explores leadership from a Reformational perspective by focusing on such issues as discipleship, character formation, working with teams, conflict resolution, leading small groups, and communication. The purpose of this course is to help students cultivate the insight and discernment needed to develop a biblical approach to leadership in dialogue with the fields of communication, organizational theory, and Christian ethics. Theology 231 recommended.
- 361 **Senior Seminar (3)**Spring
This is the capstone course for Theology majors, but it is open to minors also. This course is to help those who have studied in theology consolidate their theological education to focus on contemporary issues in the church and develop the biblical message to address contemporary life in effective public address. [Cross-listed: Worship Arts 361]
- 371- **Ministry Practicum (3-6)**Fall, Spring, Summer
372 Students will engage in field experience in a ministry related area under the guidance of both a site and a department supervisor. Three hours of course credit will be based on 126 hours of involvement. This course requires instructor permission prior to pre-registration.
- 391- **Individual Studies (1-3)**Fall, Spring, Summer
393 See page 120, Individual Studies

Worship Arts

General Major– Foundation (common to all concentrations): Business Administration 215; Communication 222; Theology 110, 111, 221, 351, 352; Worship Arts 241, 242, 333, 334, 361; a minimum of six credits from: Worship Arts 018, 281, Music 010-020, 240-270, Music, Theology, or Worship Arts Internship.

Students must select one of the following concentrations:

Art: Art 201, 202; one course from Art 207, 208, 209, 210; one course from Art 216, 218, 225, 228, 230, 240.

Communication: Communication 220, 222, 228, 240.

Digital Media: Art 201, 240; Communication 240, 250.

English: English 202, 210, 301; one course from English 303, 304, 307.

Modern Worship Forms: Music 103, 103L, 104, 104L; off campus semester on Contemporary Music Center program.

Music: Music 103, 103L, 104, 104L, 215; two courses from Music 206, 207, 208.

Theatre Arts: Theatre Arts 102, 103, 233, 234; Theatre Arts 204 or 207; Theatre Arts 203 or 262.

Theology: Two courses from Theology 211-214; two courses from Theology 215-217.

General Minor– Music 103, 103L; Theology 110, 111; Worship Arts 241, 242; one course from Business Administration 215, Worship Arts 333, 334; Music 019 or 250; two credits from Music 010-020, 240-270; two credits from Worship Arts 018, 281; two additional credits from Music 010-020, 240-270, Worship Arts 018, 281.

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| 018 | Worship Arts Ensemble Participant (.5) | Fall, Spring |
| | A worship music ensemble involving weekly participation, reflection, and coaching. | |
| 241 | Foundations of Worship (3) | Fall Even |
| | A study of the Scriptural foundation for worship and of the components of worship. There will be a brief study of historic patterns of worship, leading to the preparation of liturgies and the practice of worship-leading skills. [Cross-listed: Theology 241] | |
| 242 | Worship in Contemporary Context (3) | Fall Odd |
| | This course engages the theological and cultural issues that shape contemporary worship practices of the church. By exploring diverse worship practices students will develop a deeper understanding of the relationship between Christian worship and culture. The focus on this course is to help students cultivate discernment as they lead worship in a variety of cultural contexts. [Cross-listed: Theology 242] | |
| 281 | Worship Arts Ensemble Leader (1) | Fall, Spring |
| | Develop knowledge, confidence, skill, and character as a worship leader and participant through leadership of a worship music ensemble. | |
| 333 | Psalms, Hymns, and Spiritual Songs (3) | Spring Even |
| | An overview of the role of music in worship, worship music repertoire, and information and skills needed to plan music for worship. [Cross-listed: Music 209, Theology 333] | |
| 334 | Elements of Praxis in Worship (3) | Spring Odd |
| | The focus on this course is to equip students with the practical insight needed to lead worship in a contemporary context. This includes learning how to use equipment, how to organize and lead a practice, cultivating a stage presence, how to develop excellent sound, and incorporating a diversity of instruments into worship. Prerequisite: Worship Arts 241, 242. [Cross-listed: Theology 334] | |
| 361 | Senior Seminar (3) | Spring |
| | This is the capstone course for Theology majors, but it is open to minors also. This course is to help those who have studied in theology consolidate their theological education to focus on contemporary issues in the church and develop the biblical message to address contemporary life in effective public address. [Cross-listed: Theology 361] | |
| 391-393 | Individual Studies (1-3) | Fall, Spring, Summer |
| | See page 120, Individual Studies | |

Graduate Studies

Master of Education Program Description

Dordt University's undergraduate programs and graduate education program grow out of a Christian perspective rooted in the Reformed tradition. Dordt faculty and students approach the teaching profession as a calling to help guide young people to a greater understanding of God's creation and a greater commitment to lives of discipleship. We believe that teachers and students are created for a relationship with God as his image bearers and must treat one another with integrity and dignity. In the graduate education program, new ideas for teaching and leading are developed and critiqued in light of biblical principles. Graduates of the Dordt M.Ed. program will be better able to articulate a Christian perspective for education. They will also be prepared to translate that perspective into practice within their classroom, school, and community.

Licensure

The Dordt University M.Ed. in Curriculum and Instruction has been approved by the Iowa Department of Education. Specializations in the curriculum and instruction track may lead, in conjunction with undergraduate courses, to license endorsements in developmental reading, early childhood education, and special education. Some endorsements may be required by the state to have additional student teaching hours. Six semester hours from this track meet the requirements to convert an initial license to a standard license within the State of Iowa. This track also meets the master's degree requirements for the Master Educator's license. The School Leadership specialization in the Administration track leads to the Initial Administrator license in the State of Iowa. The Initial Administrator license is the entry level license for all new administrative licensees in the State of Iowa.

Master of Public Administration Program Description

Dordt's Master of Public Administration (MPA) program will equip you with the management and leadership skills you need to thrive in public or nonprofit institutions. The MPA, which is sometimes referred to as the public sector MBA, will give you invaluable experience in program evaluation, public finance, and organizational theory that will be beneficial in a variety of fields including social work, criminal justice, city management, and nonprofit work. By earning a degree in Dordt's MPA program, you will feel equipped to serve others in management positions in a variety of industries.

Drawing on the depth of the Kuyperian tradition that Dordt was founded on, Dordt's MPA program is not only informed by a deep Christian worldview but is also rooted in a vision of Christian engagement that emphasizes the value of societal institutions.

Graduate Studies Expectations

Undergraduate studies teach us how to learn and be ready to enter a profession. Graduate studies teach us how to think more deeply and make more focused professional contributions. Since college graduates are assumed to know how to study and learn quite effectively already, Dordt University expects coursework for graduate credit to be at a higher level than undergraduate work. This means even greater levels of critical and creative thinking (e.g., analysis, synthesis, evaluation, and creative application) are built into course requirements. Although the minimum number of clock hours for a graduate course is similar to that of an undergraduate course, we expect graduate students to possess or develop the ability for more efficient and deeper reading and more effective amounts of writing and other academic productivity than they most likely exhibited in their undergraduate courses. Many graduate courses also require a significant synthesizing paper or project, often with immediate professional application opportunities. Additionally, many graduate courses provide rich opportunities to collaborate with others with similar professional experiences and aspirations, creating a vibrant learning community enlivened by much more than just the instructor's credentials and years of experience. Graduate courses at Dordt also expect students' spiritual insight to develop into a deeper and more far-reaching contemporary response to course content.

Graduate Academic Calendar

2019-20 (tentative)	Day	Activity
August 27	Tuesday	M.Ed. classes begin
September 4	Wednesday	MPA fall module I classes begin
October 16	Wednesday	MPA fall module I session ends
October 30	Wednesday	MPA fall module II classes begin
November 1-12		Registration for spring semester

December 17	Tuesday	Fall semester ends
January 9	Thursday	Spring semester begins
January 22	Wednesday	MPA spring module I classes begin
March 4	Wednesday	MPA spring module I session ends
March 18	Wednesday	MPA spring module II classes begin
April 6-17		Registration for fall and summer terms
April 29	Wednesday	MPA spring module II session ends
May 8	Friday	Spring semester ends
May 8	Friday	Commencement – 10 a.m.
June 8	Monday	Graduate summer session begins
August 3	Monday	Graduate summer session ends

Graduate Admissions

Master of Education Admission

Applications for admissions are received and accepted through the year.

Regular Admission Regular admission is granted to all candidates who have met all of the admission criteria:

1. An undergraduate grade point average of at least 3.0 from an accredited institution.
2. Completion of at least 24 hours of undergraduate course work that includes the following content areas: educational psychology, applied educational psychology, learner differences, learning environments, curriculum and methods (2 courses), philosophy of education, and statistics.
3. Official transcripts sent to the Director of Graduate Studies from your undergraduate institution as well as transcripts from any graduate level course that you would like to have considered for transfer into the program.
4. Resume.
5. A recommendation form completed by your administrator or supervisor.
6. Successful teaching experience at the P-12 level for a minimum of one year or a minimum of 500 hours of verified experiences in teaching or direct coaching beyond the bachelor's degree.
7. Applicants for whom English is a second language must have an adequate command of English as demonstrated by their performance on the Test of English as a Foreign Language (TOEFL). Institutional code is 6171 and the department code is 3101.

Administrative License Only Administrative license only status may be granted to candidates applying for admission to the School Leadership specialization who already have a master's degree in education that includes the curriculum and instruction courses required in this specialization. Students with this status will not earn an additional master's degree but will be recommended for an Iowa administrative license upon completion of their licensing-only plan of study. Students meeting the following criteria may be granted this status:

1. A bachelor's degree from an accredited institution and completion of at least 24 hours of undergraduate course work in education. A graduate degree in education that includes three or more courses equivalent to EDUC 501, 502, 503, 504, 505, 560, 561, 562, 563, and 564. The overall GPA earned in this previous program must be 3.0 or above, and the grade point in each accepted equivalent course must be 3.0 or above. Courses used for equivalencies must not be more than 10 years old at the time of completion of the Dordt University plan of study.
2. Official transcripts sent to the Director of Graduate Studies from both your undergraduate and graduate programs.
3. A recommendation form completed by your administrator or supervisor.
4. Successful teaching experience at the P-12 level for a minimum of one year or a minimum of 500 hours of verified experiences in teaching or direct coaching beyond the bachelor's degree.
5. Applicants for whom English is a second language must have an adequate command of English as demonstrated by their performance on the Test of English as a Foreign Language (TOEFL). Institutional code is 6171 and the department code is 3101.

Endorsement Only Endorsement only status may be granted to candidates applying for admission to the Special Education, Developmental Reading, or Early Childhood Education specializations who already have a teacher's license and wish to add an endorsement area to that license. Students with this status will not earn a master's degree but will be recommended for an Iowa license endorsement upon completion of their endorsement-only plan of study. Taking only the required courses in these specializations may not fully qualify one for an endorsement, which requires meeting all requirements of the endorsement (including as necessary appropriate courses in one's undergraduate program). Students meeting the following criteria may be granted this status.

1. A bachelor's degree from an accredited institution and a teacher's license. The overall GPA earned in the undergraduate program must be 3.0 or above. Undergraduate courses older than 10 years old may need to be retaken or updated with additional graduate courses for the endorsement.
2. Official transcripts sent to the Director of Graduate Studies from both your undergraduate and graduate programs.
3. A recommendation form completed by your administrator or supervisor.
4. Successful teaching experience at the P-12 level for a minimum of one year or a minimum of 500 hours of verified experiences in teaching or direct coaching beyond the bachelor's degree.
5. Applicants for whom English is a second language must have an adequate command of English as demonstrated by their performance on the Test of English as a Foreign Language (TOEFL). Institutional code is 6171 and the department code is 3101.

Conditional Admission Conditional admission may be granted to applicants who do not currently meet all of the criteria for regular admission. Status of conditionally admitted students will be reviewed after nine hours of graduate course work have been completed. The grade point average in graduate course work of the student needs to be at least 3.0 before the conditional admission status can be changed to regular admission status.

Special Admission Special admission may be granted to those who do not plan to become candidates for a master's program but wish to participate in one or more graduate courses. Admission may be granted by providing the following:

1. A completed application for program admission.
2. A transcript of all undergraduate and graduate credit received.

Master of Public Administration Admission

Applications for admissions are received and accepted through the year.

Regular Admission Regular admission is granted to all candidates who have met all of the admission criteria:

1. An undergraduate grade point average of at least 3.0 from an accredited institution.
2. Official transcripts sent to the Director of Graduate Studies from your undergraduate institution as well as transcripts from any graduate level course that you would like to have considered for transfer into the program.
3. Resume.
4. Completion of an essay on your professional goals and why you wish to pursue the MPA degree at Dordt University.
5. A recommendation form completed by your supervisor or advisor or a letter of recommendation addressing the prospective student's suitability for graduate study, especially in public administration.
6. Applicants for whom English is a second language must have an adequate command of English as demonstrated by their performance on the Test of English as a Foreign Language (TOEFL). Institutional code is 6171 and the department code is 3101.

Conditional Admission Conditional admission may be granted to applicants who do not currently meet all of the criteria for regular admission. Status of conditionally admitted students will be reviewed after nine hours of graduate course work have been completed. The grade point average in graduate course work of the student needs to be at least 3.0 before the conditional admission status can be changed to regular admission status.

Special Admission Special admission may be granted to those who do not plan to become candidates for a master's program but wish to participate in one or more graduate courses. Admission may be granted by providing the following:

1. A completed application for program admission.
2. A transcript of all undergraduate and graduate credit received.

Transfer of Credit

Graduate work completed at other regionally-accredited graduate institutions may be accepted in partial fulfillment of the requirements for a master's degree at Dordt University subject to the following conditions:

1. Transfer credit will not be allowed for any graduate level course in which the grade received was lower than a B (3.0).
2. A maximum of six semester hours may be transferred from regionally-accredited institutions who are not ARCU members. Three additional hours may be transferred from any institution belonging to the Association of Reformed Colleges & Universities (ARCU). ARCU institutions currently include the following: Calvin University, Covenant College, Dordt University, Geneva College, Institute for Christian Studies, King's University College, Providence Christian College, Redeemer University College, and Trinity Christian College.
3. Each request for transfer of graduate credit will be considered on an individual basis. The value of the course content in relationship to the applicant's program will be considered in the decision.
4. Any graduate work undertaken at another institution after admission to the Dordt University graduate program must be approved in advance by the Director of Graduate Studies.
5. Correspondence credits will be accepted toward the master's degree program only with prior approval of the Director of Graduate Studies.
6. Courses older than 10 years at the end of a student's Dordt studies will not be accepted for transfer credit.
7. Course equivalents from previous graduate degrees used as licensing requirements in the Administrative Licensing Only status are not considered transfer courses. Students in this status are not degree seeking, and these former courses, though necessary for a state licensing recommendation, are not "transferred in" for credit toward a degree.

Graduation

To be eligible for the Master of Education degree the student must have:

1. Completed all admission to candidacy requirements.
2. Completed all required credits. (Note: The Action Research Project for EDUC 510 must be complete by the end of March for a student's inclusion in the May commencement bulletin and program.)
3. Achieved a minimum grade point average of 3.0 for the total graduate program, with no more than three hours of grade "C" included.
4. Completed a formal application for graduation with a \$100.00 program completion fee.

To be eligible for the Master of Public Administration degree the student must have:

1. Completed all admission to candidacy requirements.
2. Completed all required credits.
3. Achieved a minimum grade point average of 3.0 for the total graduate program, with no more than three hours of grade "C" included.
4. Completed a formal application for graduation with a \$100.00 program completion fee.

Graduate Finances

Expenses

Tuition and fees assessed are designed to cover the costs incurred by the university in providing a quality education at a reasonable price.

Tuition for Graduate Programs

Master of Education course per credit hour	\$330
Master of Public Administration course per credit hour	\$500

Fees

One-time technology fee	100
Program completion fee	100
Optional commencement fees	
Master's Hood (for purchase)	50
Thesis hardcopy (for Teacher Leadership students)	75

Registration and Payment of Fees for Graduate Students

Students will register through their student portal in April for the summer and fall semesters and in November for the spring semester. A late registration fee will be charged for registrations after the given deadline for each semester. New student computer accounts will be activated upon registration. Appropriate course materials will be sent to the student. Tuition and applicable fees are due and payable at the beginning of each session. A finance charge of .75 percent per month (nine percent annual percentage rate, accrued monthly) is charged on all unpaid accounts. Students may not register for a new session if their account balance is not paid in full. The university will withhold transcripts and grade reports until accounts are paid in full.

Online Payment Option Credit Card or online bank payments can be initiated through Dordt's third-party servicing agent, ACI. Dordt University uses ACI for collection of online payments. For credit/debit card payments, ACI charges a fee of 2.65% (\$3.95 minimum). For ACH payments from your checking account, ACI charges a fee of \$0.75.

If you choose not to make an online payment, you may send a check or money order to the Dordt University Business Office, 700 7th St NE, Sioux Center, IA 51250. If you have further questions, contact studentaccounts@dordt.edu.

The Canadian Exchange Rate is determined the 1st and 15th of each month and can be viewed online or by contacting the Business Office at 712-722-6013.

Refund Policy When a student registers for one or more courses, computer accounts are activated and the student is entered into the registration database. If a student completely terminates enrollment (i.e., cancels his/her registration, withdraws, or is dismissed) during the semester, the student's refundable charges and financial aid will be prorated if the student has been enrolled for 60 percent of the semester or less. If a student has been enrolled for more than 60 percent of the semester, the student is not eligible for a reduction in charges. The withdrawal date

is the later of (1) the date the student begins the withdrawal process by providing official notification (oral or written) of the intent to withdraw; or (2) the student's last date of attendance at an academically related activity. A student who wishes to withdraw must contact the Director of Graduate Studies to initiate and complete the appropriate paperwork.

The percentage of the semester completed is calculated by dividing the number of days enrolled by the number of calendar days in the semester, including weekends and holidays, but excluding breaks of five or more consecutive days. For example, if there are 107 calendar days in a semester and a student's withdrawal date is on the 50th day, the student's refundable charges and financial aid will be prorated to reflect enrollment for 46.7 percent of the semester (50 days divided by 107 days).

Financial Aid

Dordt University provides financial aid to graduate students in the form of federal loan programs. Costs are kept as reasonable as possible in an effort to make a graduate education available to as many people as possible. Grants from federal sources are not available for graduate study. No institutional grants are available because the university has already designed the program to have a very low tuition rate.

To receive financial aid, a student must complete a FAFSA (Free Application for Federal Student Aid) to determine the amount a student (and spouse) can contribute from their own resources. If applying for aid in the summer, please use the upcoming year's FAFSA. Once the family contribution has been established, any additional need can be met through one of the federal loan programs.

Generally, a graduate student is considered an independent student for financial aid purposes. This means only student (and spouse) information is required rather than parental information. An exception to this would be students who are taking graduate and undergraduate courses at the same time. These students would be treated as undergraduate students and would have their dependency status determined according to the rules currently in place for undergraduate students.

In order to receive financial aid, a student must be at least a half-time student for U.S. financial aid programs. A Canadian student will be required to be full-time to receive a Canada Student Loan. The following loans may be available to students applying for financial aid:

Federal Unsubsidized Stafford Loan Program This is a federal loan program. A Federal Stafford Loan for graduate students is always unsubsidized. This means interest will accrue as soon as the loan is disbursed. Interest rates are determined on July 1 for the upcoming school year.

Canada Student Loan Program These loans are available to the full-time Canadian students in most provinces. The interest rate is determined at the time repayment begins. The amount of the loan varies, but usually ranges between \$6,000–\$7,000 Canadian dollars. Applications can be obtained at the provincial office of education and should be applied for well before the funds are needed.

Veterans' Education Benefits Dordt University is approved to offer education to students who are eligible for benefits under the terms of the Veterans' Post 9/11 GI Bill. Eligible students should write to their regional Veterans' Administration Office to obtain the application information. Dordt University also participates in the Yellow Ribbon Program.

For students utilizing the GI Bill, Dordt University will not impose any penalty including: 1) the assessment of late fees; 2) the denial of access to classes, libraries or other institutional facilities and /or 3) the requirements that a Chapter 31 or Chapter 33 recipient borrow additional funds to cover the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement of a payment by the U.S. Department of Veterans Affairs.

Enrollment Status Students who are registered in a fall or spring semester for at least nine semester-hours are considered full-time in the program. Students registered for fewer than nine credits are considered part-time.

Graduate Academic Policies

All general academic policies as listed in the undergraduate section at the front of the university academic catalog apply to graduate studies as well unless a university policy is modified specifically for graduate programs as listed below.

Academic Advisor The Graduate Studies Academic Advisor serves as the advisor to all graduate students.

Academic Alert Students who finish a term with a cumulative or term GPA below the graduation requirement (3.00) will be alerted to their academic status at the beginning of the following semester. Students will be urged to talk with a faculty member or the Office of Graduate Studies to create a remediation strategy. Alerts may also be issued during a semester when an instructor reports that a student is in danger of failing his or her course. Academic alerts do not result in any additional restrictions of activity or loss of financial aid but are intended to inform students of their current situation so they can take action to correct it.

Academic Probation Students who finish a semester with a cumulative GPA below 2.00 will be placed on academic probation. Students are notified by letter when placed on probation. The graduate studies committee will set certain requirements for a student on probation, including a minimum GPA to be attained in the following semester. A student who has been placed on academic probation and fails to meet the requirements established by the committee the following semester will be subject to academic suspension. Probation may result in the loss of certain forms of financial aid.

Academic Standing A graduate student is expected to maintain a minimum cumulative GPA of 3.00 to graduate. Students with a GPA falling below 2.00 are put on academic probation and must remedy this situation in their next term of coursework. Students with GPAs below 3.00 are provided a warning and monitoring by the Office of Graduate Studies until the GPA is 3.00 or above.

Academic Suspension Students who do not remedy a GPA below 2.00 within their next term of coursework are subject to academic suspension from the university for a period of one semester. Students suspended from the university will be notified of their suspension immediately in writing and may be given an opportunity to file a letter of appeal prior to the start of the next semester. Students filing an appeal must do so in writing to the registrar by the time indicated in the notification of suspension. The letter of appeal should explain the situation leading up to the suspension, including extraordinary circumstances such as serious illness, injury, or family crisis, and include a specific plan for correcting the problems. Students allowed to return on the basis of an appeal will be placed on academic probation as described above. Students allowed to return on appeal will be subject to suspension without appeal or dismissal if they ever fail to meet the terms established by the graduate studies committee. Students who do not file a letter of appeal or whose appeal is not granted may apply for readmission after a lapse of one semester. Readmission is not automatic but is based on evidence that the circumstances leading up to the suspension have been resolved.

Academic Dismissal Students who have been suspended and readmitted and who fail to meet the requirements specified by the graduate studies committee will be subject to permanent academic dismissal.

Audit and Institutional Visitor Policies Auditor and visitor status are not available for graduate courses.

Class Attendance All students are expected to participate in all class and related functions, whether synchronous or asynchronous. Dordt's online learning management system allows instructors to check the course resources accessed and the time spent on various parts of the course webpages. Penalties for non-participation are left to the individual instructors. The instructor may lower a student's grade if there have been excessive absences or periods of non-participation. The instructor may also alert the graduate studies office.

Credits A three-credit course offered during a 16-week semester requires 8-10 hours of student work per week. A three-credit course offered during an 8-week summer term requires 15-20 hours of student work per week. A three-credit course offered during a 6 week module requires 20-25 hours per week. Graduate students should carefully plan ahead (and perhaps read ahead) to fit their studies into their professional and personal commitments.

Dropping Courses Changes in registration must be completed during the add/drop period (within one week after the opening of a fall or spring semester, within the first three days of a summer session). Courses dropped during the add/drop period do not appear on the student's transcript. After the add/drop period, a student may withdraw from a course with permission of the instructor and registrar until the two-thirds point of the semester or term is reached. Withdrawn courses appear on a transcript with a grade of W. All courses dropped after the two-thirds point of the semester will be recorded as F.

Enrollment in Other Schools Students who are enrolled at Dordt University will not be permitted to take work for academic credit in the same semester in other schools without permission from the Director of Graduate Studies, who along with the registrar, must approve in advance all courses taken at other institutions.

Grade Point Average Students must have a minimum cumulative GPA of 3.00 in courses taken at Dordt University to meet graduation requirements for a graduate degree. The GPA is determined by dividing the total number of grade points by the total number of hours attempted. A grade of F in a course will be computed in the student's GPA (this refers to both regular courses and pass/fail courses); a student who withdraws from a course prior to the expiration of 10 weeks in a semester or 5 weeks in a summer term will not have the W computed in his/her GPA.

Grading System Grades in the graduate program have the following meaning. Individual instructors determine whether to use plus and minus grading in their courses.

Grade	Points Per Hour	Description
A	4.00	Superior
B	3.00	Good
C	2.00	Passing, but below graduation requirement
D	1.00	Unsatisfactory, credits not applicable to the degree
F	0.00	Failure

Graduation Students must make application for graduation the semester or term prior to their graduation. Commencement exercises are held only at the end of the spring semester. In order to participate in the commencement exercises, the student must have completed all coursework for the degree.

Incompletes Under exceptional circumstances and with prior permission of the course instructor and director, a student may request additional time to complete assignments. However, after three months from when grades are due, all incompletes will receive a grade based on the materials submitted at that point.

Registration Registration takes place before each semester. Students will be sent instructions and appointments several weeks prior to the registration dates. Registration is not completed until tuition and fees have been paid. A late registration fee is charged if registration is not completed on the designated registration day each semester.

Repeating Courses Any course with a grade of B (3.00) or lower may be repeated. The original grade remains on the transcript with a reference to the repeated course. Only the last instance of the course on the transcript is factored into the cumulative GPA.

Residence Requirement Graduate students must take all courses listed in their program requirements as described below. A maximum of six transfer credits from other institutions is granted or nine credits from institutions belonging to the Association of Reformed Colleges & Universities (ARCU).

Student Load Since 30-36 credits are required for the Master's of Education degree specializations, students who plan to complete these specializations in two to three years must average 10-18 credits per year. This generally means taking one course each fall and spring semester for two years and two or three courses each summer. Students taking three years to complete their program should take courses during two-thirds of their semesters in the program and should take two courses each summer. These plans assume students are working full time during the semesters but have more flexible hours during the summer term. Students are not permitted to take more than two courses (with field hours if applicable) per semester or more than three courses (nine credits) in an 8-week summer term.

Students enrolled in the Master of Public Administration program are required to complete 36 credits. Cohorts begin in the fall semester. Students who plan to complete the program in two years will average 18 credits a year. Each semester has two six-week modules in which students take one three-credit course in each module. These plans assume students are working full time during the semesters. Students are not permitted to take more than one three-credit course in a six-week module. Students who withdraw from a course may retake the course the next time the course is offered. Students needing more than two years to complete the program work with the Graduate Studies Academic Advisor to develop an alternative plan of completion.

Time Limit All degree requirements must be completed within six years from the beginning of the first graduate coursework at Dordt University. Approval of the graduate studies committee is needed for an extension. Coursework taken more than six years prior to completing degree requirements may be updated and validated by examination. Requests for such examination must be made to the Director of Graduate Studies.

Withdrawal from School A student who wishes to withdraw from school must obtain the necessary withdrawal form from the Graduate Studies Office. The form must be signed by representatives from the Financial Aid, Registrar, and Business Offices. Refunds are based upon the date of approval. Students who withdraw before the end of the semester will receive a grade of W in each course. Students should be advised that withdrawing may affect their financial aid.

Graduate Academic Offerings

Master of Education Course Listings and Descriptions

Dordt University offers a Master of Education degree with six specializations in the Curriculum and Instruction track: Developmental Reading, Early Childhood Education, Educational Technology, Instructional Coach, Special Education, and Teacher Leadership and two specializations in the Administration track: School Leadership and Sport Leadership.

Curriculum and Instruction (students must select one of the following specializations):

Developmental Reading:	Education 501, 502, 503a, 504, 505, 506, 508, 511, 513, 521, 522 (30 credits). (Meets the master's degree requirements for a master educator license in the State of Iowa and in conjunction with undergraduate courses in reading may lead to a developmental reading endorsement.)
Early Childhood Education:	Education 501, 502, 503a, 505, 508, 511, 512, 513, 522, 531, 532, 533 (30 credits). (Meets the master's degree requirements for a master educator license in the State of Iowa and in conjunction with undergraduate courses in early childhood may lead to an early childhood endorsement.)
Educational Technology:	Education 501, 502, 503a, 504, 508, 541, 542, 543, 544, 545, 551 (30 credits). (Meets the master's degree requirements for a master educator license in the State of Iowa.)
Instructional Coach:	Education 501, 502, 503a, 504, 505, 506, 507, 522, 523, 551, 559, 561 (30 credits). (Meets the master's degree requirements for a master educator license in the State of Iowa.)

Special Education Strategist I: Education 501, 502, 503a, 505, 508, 511, 512, 513, 514, 519, 522, 523 (30-38 credits).
 Special Education Strategist II: Education 501, 502, 503a, 505, 508, 515, 516, 517, 518, 519, 522, 523 (30-38 credits).
 (Meets the master's degree requirements for a master educator license in the State of Iowa and may lead to a special education endorsement.)

Student teaching: Each applicant for an Iowa license with a special education instructional endorsement must file evidence of completing an approved student teaching program in special education. This experience must be full-time in an approved special education classroom. An approved special education classroom is one which is recognized by the state in terms of the respective state rules for special education. This special education student teaching experience shall qualify for each special education instructional endorsement sought on an original application for Iowa licensure if at the same grade level.

Teacher Leadership: Education 501, 502, 503a, 503b, 504, 505, 506, 507, 508, 509, 510 (30 credits).
 (Meets the master's degree requirements for a master educator license in the State of Iowa.)

Administration (students must select one of the following specializations):

School Leadership: Education 501, 502, 503a, 503c, 504, 505, 560, 560L, 561, 561L, 562, 563, 563L, 564, 564L (30-36 credits).
 (Meets initial Administrator License 189 plus the evaluator approval 190 requirements in the State of Iowa.)

Sport Leadership: Education 501, 502, 503a, 503c, 560, 563; HHP 510, 515, 520, 525; six credits of HHP 530 (33 credits).
 (Does not lead to licensure.)

The 500-level courses are graduate education courses, closed to undergraduate students unless they have completed all degree requirements except student teaching.

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| EDUC 501 | Issues in Education (3) Summer
This course critically examines the philosophical and historical background and context of contemporary educational practice. The focus is on key issues currently affecting the areas of teaching, curriculum, learning, and the school as an institution. Emphasis falls on relating philosophical and historical contexts to daily classroom practice. Course participants are equipped to use philosophical analysis as part of their reflective practice drawing on understandings and commitments in this course. |
| EDUC 502 | Learner Development and Principles of Learning (3) Summer
This course examines a biblical model of the teacher, learner, and the learning process. Consideration is given to the application of a biblical model as it relates to teaching and learning. This model is weighed and examined against other psycho-educational theories of development and learning. This course will equip leaders to create learning environments that celebrate image bearing. |
| EDUC 503a | Interpreting Educational Research (1.5) Summer, Fall
This course provides teachers and leaders with a conceptual introduction to the essential principles and appropriate methods of educational research. Course participants will be equipped to analyze and interpret existing research and critique contemporary methods, techniques, and trends in education. Corequisite: Education 503b or 503c as required by specialization. |
| EDUC 503b | Action Research Proposal (1.5) Fall
A continuation of Education 503a for teacher leaders, this course allows students to apply concepts from Education 503a to propose and begin an action research project in their own classrooms or schools. Corequisite: Education 503a. |
| EDUC 503c | Educational Research for School Leaders (1.5) Summer
A continuation for Education 503a for school leaders to apply concepts from Education 503a, this course allows students to develop a research-based proposal for school improvement. Corequisite: Education 503a. |
| EDUC 504 | Curriculum Development and Evaluation (3) Summer
Framed in a biblical orientation, this course examines and develops curricular structures. Consideration will be given to how state, provincial, and Core Curriculum standards fit within these curricular decisions. Topics include an examination of content delivery models, appropriate instructional design models, and methods for implementing curricular change. |
| EDUC 505 | Foundations of Special Education (3) Summer
This course focuses on the characteristics of individuals with special learning needs and the implications resulting from those needs for the development of educational programming. As we explore the field of special education, we will become more familiar with information and issues related to teaching children and adolescents who have been identified as exceptional. Specifically, we will consider definitions and terminology in the field of special education, characteristics of students within the various categories of exceptionality, historical perspective towards those with disabilities, Christian perspective on disability, and the impact of disability |

on the family, community, and society at large. We will also explore approaches for instruction, special education services, and assistive technology to meet the needs of exceptional learners. This course assumes that students have previously taken an overview of exceptionalities course.

- EDUC 506 Best Practices in Instructional Strategies (3)** Summer Odd
This course examines practices and theories in advanced pedagogy and instruction. Geared for the classroom teacher who wants to take instruction to the next level as well as the instructional coach working with colleagues, the course uses a biblical foundation to explore the nature of teaching and learning and to examine a variety of research-based, objectives-driven teaching and instructional strategies.
- EDUC 507 Classroom Assessment Strategies (3)** Fall
This course seeks to align assessment practices with a biblical understanding of the roles of teacher and learner. The course invites the examination and evaluation of formative and summative assessment strategies; application and design of appropriate assessment strategies for effective and developmentally appropriate learning environments; proficiency in multiple forms of assessment; and the development of skills and strategies to help students become effective self-assessors.
- EDUC 508 Teaching and Learning with Technology (3)** Spring
This course is designed to foster creative and divergent thinking regarding the application and integration of technology into the processes of teaching and learning. The intent is to “distinguish sharply, think critically, and judge wisely” how technology is changing the teaching/learning environment. Hands-on technology training will provide a basis upon which participants will reconstruct curriculum and instructional techniques to support the learning needs of their students.
- EDUC 509 Teacher Leadership Field Experience (3)** Summer
This course provides opportunities for teacher leaders to practice biblical servant leadership within the areas of professional and curriculum development in school. The course offers opportunities for teacher mentoring, teacher-led professional development, as well as curriculum development and evaluation. This culminating course puts into practice the principles of the M.Ed. in Teacher Leadership.
- EDUC 510 Action Research Project (3)** Spring
This course is the fruitful interaction of faith, educational theory, and practice and will allow teacher leaders to explore in depth an issue or idea that will help improve instruction in their classrooms or school. The action research project allows teacher leaders to add to the body of educational knowledge by exploring problems and issues from a biblical perspective.
- EDUC 511 Assessment of Learning Difficulties (3)** Fall Even
This course is an advanced course in assessment which focuses on assessment of learning difficulties, emphasizing language and processing deficits and how they interfere with academic achievement and social relationships. Various formal and informal assessments are examined, and consideration is given to how the results can be applied to the development of educational programs that meet the needs of exceptional students with mild or moderate disabilities. Significant time is spent in gaining experience administering and scoring various tests with target students. Prerequisite: Education 505.
- EDUC 512 Advanced Behavioral and Social Interventions for Exceptional Children (3)** Summer Odd
This course is an advanced course for understanding and working with children and adolescents with mild or moderate behavior difficulties. The course examines research and theories on behavior assessment, interventions, and monitoring with special emphasis on providing leadership on behavior interventions in a school or district. You will be encouraged to reflect on children’s normal emotional/behavioral development in order to see problems in their proper perspective. The emphasis is on the instructional process for managing behavior of students within the context of a Christian approach to teaching. Prerequisite: Education 505.
- EDUC 513 Instructional Decisions (3)** Spring Even
This course offers applied training in advanced practical aspects of the instruction of students with mild or moderate disabilities who qualify for special education under IDEA and in providing leadership in special education programming in a school or district. We will consider the role of the special education teacher in writing IEPs and IFSPs, in providing individualized instruction to students with disabilities, in supporting students with medical complications, in providing professional consultation and collaboration, and in implementation of strategies directed toward the successful integration of students with disabilities into the school and the general education classroom to the extent possible. We will also consider topics related to early intervention, assistive technology, and transition. Prerequisite: Education 505.
- EDUC 514 Transition Support and Collaborative Partnerships (3)** Fall Odd
This course prepares teachers and administrators to effectively plan for and support students with mild or moderate disabilities as they move from school to adult life. Course topics include preparing for the transition planning process, transition-related assessments, instructional strategies, developing functional skills, vocational training, development of family and community supports, setting up collaborative partnerships, and the preparation of Individualized Transition Programs. Prerequisite: Education 505.

- EDUC 515 Assessment of Learning Difficulties (3)**.....Fall Even
This course is an advanced course in assessment which focuses on assessment of learning difficulties, emphasizing language and processing deficits and how they interfere with academic achievement and social relationships. Various formal and informal assessments are examined, and consideration is given to how the results can be applied to the development of educational programs that meet the needs of students with behavior disorders and learning disabilities. Significant time is spent in gaining experience administering and scoring various tests with target students. Prerequisite: Education 505.
- EDUC 516 Advanced Behavioral and Social Interventions for Exceptional Children (3)**.....Summer Odd
This course is an advanced course for understanding and working with children and adolescents with behavior difficulties associated with behavior disorders and learning disabilities. The course examines research and theories on behavior assessment, interventions, and monitoring with special emphasis on providing leadership on behavior interventions in a school or district. You will be encouraged to reflect on children's normal emotional/behavioral development in order to see problems in their proper perspective. The emphasis is on the instructional process for managing behavior of students within the context of a Christian approach to teaching. Prerequisite: Education 505.
- EDUC 517 Instructional Decisions (3)**.....Spring Even
This course offers applied training in advanced practical aspects of the instruction of students with behavior disorders and learning disabilities who qualify for special education under IDEA and in providing leadership in special education programming in a school or district. We will consider the role of the special education teacher in writing IEPs and IFSPs, in providing individualized instruction to students with disabilities, in supporting students with medical complications, in providing professional consultation and collaboration, and in implementation of strategies directed toward the successful integration of students with disabilities into the school and the general education classroom to the extent possible. We will also consider topics related to early intervention, assistive technology, and transition. Prerequisite: Education 505.
- EDUC 518 Transition Support and Collaborative Partnerships (3)**.....Fall Odd
This course prepares teachers and administrators to effectively plan for and support students with behavior disorders and learning disabilities as they move from school to adult life. Course topics include preparing for the transition planning process, transition-related assessments, instructional strategies, developing functional skills, vocational training, development of family and community supports, setting up collaborative partnerships, and the preparation of Individualized Transition Programs. Prerequisite: Education 505.
- EDUC 519 Teaching Students with Complex Communication and Behavior Needs (1.5)**.....Spring Odd
This course explores methods and supports for developing independence in individuals with autism spectrum disorders, behavior struggles, and complex communication needs. The emphasis is on evidence supported strategies. Topics addressed in the course include planning interventions based on assessment results, choosing strategies and assistive technology to meet specific individual needs, functional communication training, teaching social communication, and developing environmental supports. Prerequisite: Education 505.
- EDUC 521 Advanced Content Reading and Children's Literature (3)**.....Summer Odd
This course provides a graduate level examination of teaching reading in the content areas and thematic integration of children's literature in the curriculum. The course focuses on current theories and best practices.
- EDUC 522 Advanced Pedagogies for Teaching Literacy (1.5)**.....Summer Odd
This course provides a research-based, objective driven focus on the subject matter, content standards, pedagogy, and issues related to the learning and teaching of P-12 language arts for all students. The course examines the speaking, listening, reading, and writing experiences of young children and the continued development of literacy into adolescence. Students develop strategies and applications specific to literacy learning needs in challenging situations. Students complete a reading and writing learning analysis, diagnostic assessment, and implementation plan for a specific learning situation or challenge.
- EDUC 523 Advanced Pedagogies for Teaching Math (1.5)**.....Summer Odd
This course provides in-depth focus on the subject matter, content standards, pedagogy, and issues related to the learning and teaching of math for all students. Students develop strategies and applications specific to math learning needs in challenging situations. Students complete a math learning analysis, diagnostic assessment, and implementation plan for a specific learning situation or challenge.
- EDUC 531 Issues in Early Childhood Education and Curriculum (3)**.....Summer Even
This course examines the spectrum of early childhood education from birth through age eight. History, program applications, and current trends and issues in early childhood education are evaluated. Course projects focus on planning, implementing, and evaluating developmentally appropriate, evidence-based curriculum for young children with diverse backgrounds. Students practice aligning learning objectives to the Iowa Quality Preschool Program Standards.
- EDUC 532 Organization and Administration of Early Childhood Education (1.5)**.....Summer Odd
This course focuses on the organization and management of early childhood and childcare programs from a Christian perspective.

tive with emphasis on planning, organizing, managing, and evaluating programs and facilities for young children. Specific skills addressed are licensing procedures, hiring, motivating, and evaluating staff and parent involvement. General leadership skills addressed include budgeting, scheduling, communication, and visioning as applied to early childhood learning environments. This course requires 20 hours of field experience. The latest Iowa Quality Preschool Program Standards Report is used to evaluate best practices in childhood education.

- EDUC 533 Infant and Toddler Education (1.5)**Fall Odd
This course focuses on the rapid cognitive, physical, and social development during the first three years of life. This stage is critically important for infants and toddlers as they develop foundations for lifelong learning. The course focuses especially on developmental issues with special needs infants and toddlers. The Iowa Quality Preschool Program Standards are examined and applied to various infant and toddler care and learning environments.
- EDUC 541 Technology Integration (3)** Summer Odd
This course provides examination of and practice in technology integration strategies in classroom environments, using various applications, instructional, and productivity software. Students practice evaluating tools and resources and developing integrated instructional activities. Students produce a problem-based learning unit of instruction that integrates technology meaningfully and effectively.
- EDUC 542 Emerging Technologies (3)** Summer Odd
This course explores the use of emerging technologies such as virtual worlds, games, and simulations. YouTube, social networking, and mobile apps for use as education tools. Students evaluate the technologies using ISTE standards and create projects for use in their educational environment.
- EDUC 543 Online Teaching and Learning (3)**Spring Even
This course examines research-supported practices in online and blended classrooms. The course emphasizes technology-supported teaching and learning, classroom management, lesson design, learner engagement, and individualized instruction. Student projects include online or blended units of instruction and learning modules in a Learning Management System.
- EDUC 544 E-Learning Design (3)**Summer Even
This course applies learning theory, principles of visual literacy, and graphic design techniques for instructional media development. Emphasis is on various models of online delivery, content organization, and graphic design. Course participants create a fully developed online course.
- EDUC 545 Portfolio - Educational Technology (1.5)**Fall, Spring, Summer
This course is the culmination of the educational technology specialization and requires the significant expansion and polishing of three major projects from the various emphases of the whole program. Students are expected to prepare all three projects for possible presentation to a school board, faculty development event, or professional conference. The expectation is that at least one will be actually presented in such a venue.
- EDUC 551 High Impact Coaching (3)**Fall Even
Participants in this course will examine instructional coaching practices that are proven to have significant positive impact on student learning, engagement, and achievement. Assignments will engage participants in practicing skills and strategies associated with non-evaluative, reflective communication with colleagues that lead to collaboration, ongoing dialogue and feedback, and to productive change.
- EDUC 559 Internship in Instructional Coaching (1.5)**Spring Even
Participants will apply and integrate the knowledge and skills of instructional coaching through one-on-one coaching cycles with individual teacher partners or teaching teams within their school or district. Participants will be challenged to thinking critically about their teacher leadership/coaching roles as they facilitated their school's Professional Learning Communities around best practices in teaching and learning.
- EDUC 560 Foundations of Educational Leadership (3)** Fall
This course provides a comprehensive overview of the field of educational administration from a distinct perspective of what it means to lead Christianly. Content includes an examination of theories of leadership, leadership traits, leadership behaviors, contemporary approaches, and the Iowa School Leadership Standards. The course includes 40 hours of field experience. Concurrent enrollment in Education 560L is recommended.
- EDUC 560L Field Experience I in Educational Leadership (1.5)**Fall
In this course, participants engage in a field-based learning experience of an additional 60 hours under the joint supervision of a school administrator and Dordt University faculty. Activities are aligned with Education 560 and serve as evidence of meeting State of Iowa administrative licensing standards. Concurrent enrollment in Education 560 is necessary for students seeking administrative licenses with a substantial number of required field hours. Graded on a pass/no-record basis.

- EDUC 561 Instructional Leadership (3)** Spring
This course will provide a theoretical and practical overview of the supervision and evaluation of instruction, recognizing the implications of teachers and students being created in the image of God. Practical, interactive exercises will be used to develop skills in the clinical process and developmental approach to supervision. Attention will also be given to supervision of the school/district professional development programs. One of two evaluator approval elements required by Iowa licensure is met through this course. The course includes 40 hours of field experience. Concurrent enrollment in Education 561L is recommended.
- EDUC 561L Field Experience II in Educational Leadership (1.5)** Spring
In this course, participants engage in a field-based learning experience of an additional 60 hours under the joint supervision of a school administrator and Dordt University faculty. Activities are aligned with Education 561 and serve as evidence of meeting State of Iowa administrative licensing standards. Concurrent enrollment in Education 561 is necessary for students seeking administrative licenses with a substantial number of required field hours. Graded on a pass/no-record basis.
- EDUC 562 Legal and Ethical Foundations in Educational Leadership (3)** Summer
Examination of the fundamental issues of law and ethics as they are applied to the classroom teachers and school administrators. Areas to be studied include educational structure and governance, church/state relations, students' rights, teachers' rights and responsibilities, and tort liability.
- EDUC 563 Collaborative Leadership (3)** Fall
This course focuses on organizational influences on leadership, communications in schools, decision making, managing conflict, and facilitating change in schools. The course also emphasizes a recognition of the role schools play in community restoration and reconciliation processes. The course includes 40 hours of field experience. Concurrent enrollment in Education 563L is recommended.
- EDUC 563L Field Experience III in Educational Leadership (1.5)** Fall
In this course, participants engage in a field-based learning experience of an additional 60 hours under the joint supervision of a school administrator and Dordt University faculty. Activities are aligned with Education 563 and serve as evidence of meeting State of Iowa administrative licensing standards. Concurrent enrollment in Education 563 is necessary for students seeking administrative licenses with a substantial number of required field hours. Graded on a pass/no-record basis.
- EDUC 564 Management and School Improvement (3)** Spring
This course focuses on the presentation and development of methods for creating a climate of continuous, systemic improvement in schools. Participants will gain understanding of how the relationships among the development of learning communities, teacher leadership, school effectiveness, and site-based accountability can positively improve schools. Also covered are the basic principles and purposes of effective personnel practices and policies. Attention will be focused on the various approaches to personnel staffing, budgeting, and contract negotiations. The second of two evaluator approval elements required by the state of Iowa are met in this course. The course includes 40 hours of field experience. Concurrent enrollment in Education 564L is recommended.
- EDUC 564L Field Experience IV in Educational Leadership (1.5)** Spring
In this course, participants engage in a field-based learning experience of an additional 60 hours under the joint supervision of a school administrator and Dordt University faculty. Activities are aligned with Education 564 and serve as evidence of meeting State of Iowa administrative licensing standards. Concurrent enrollment in Education 564 is necessary for students seeking administrative licenses with a substantial number of required field hours. Graded on a pass/no-record basis.
- EDUC 577 Student Teaching Internship- Elementary Instructional Strategist (4-8)** Fall, Spring
The teaching internship in an elementary (grades K-8) special education setting is the capstone experience of the M.Ed. Special Education specialization. Interns co-teach, to the greatest extent possible, with qualified mentor teachers in classroom settings appropriate for their intended special education license.
- EDUC 578 Student Teaching Internship- Secondary Instructional Strategist (4-8)** Fall, Spring
The teaching internship in a secondary (grades 5-12) special education setting is the capstone experience of the M.Ed. Special Education specialization. Interns co-teach, to the greatest extent possible, with qualified mentor teachers in classroom settings appropriate for their intended special education license.
- EDUC 591-593 Individual Studies (1-3)** Fall, Spring, Summer
See page 120, Individual Studies
- HHP 510 Leadership Principles in Sport (3)** Summer Odd
This course, through readings, assignments, and applied projects, will help develop an advanced perspective on sport leadership with emphasis on developing sportsmanship and personal growth among players, coaches, and others. Issues such as human potential and responsibility, diversity, competition, and faithfulness to one's neighbor are examined through a Christian lens.

HHP 515	Ethics and Sport (3).....Fall Even This course, through readings, assignments, and applied projects, will help develop an advanced perspective on ethics in sports with emphases on addressing pressing ethical issues in contemporary sports and formulating a biblically faithful response in this area to God and one's neighbor. Genuine biblical insight is sought in examining issues such as the physical and emotional health of players, strategizing with the rules on and off the field, boosters and marketing/branding, scholarships, life after sports, and a balanced and fit life.
HHP 520	Christian Perspectives on Advanced Sport Psychology (3) .....Summer Even This course will help develop an advanced level of understanding for sport leadership, coaching, administration, and physical activity by exploring the psychological and sociological aspect of human movement. Secondly, the student will develop a reformed understanding of human movement via discussions, written assignments, and presentations on a variety of issues related to the areas of health and exercise, sport, and leadership.
HHP 525	Administration of Interscholastic Sports (3).....Summer Even This course, through readings, assignments, and applied projects, will help develop an advanced perspective on interscholastic sports administration with emphases on addressing community needs, responsible resource and personnel management, servant leadership in a highly visible position, and personal growth as a manager and shaper of attitudes. Issues such as faithfulness, stewardship, fairness, wisdom, and providing a positive example in the school and community are examined through a Christian lens.
HHP 530	Practicum Series (3) .....Fall, Spring, Summer This practicum experience is repeated for a total of six credits over an entire school year. The practicum provides opportunity for real-world, hands-on application and practice of the leadership principles studied throughout the program. Emphasis is on synthesizing theories and strategies to form a genuinely Christian stance on all aspects of sport leadership. Special emphasis is on making a difference in the lives of players, coaches, and others and on personal growth as a leader and public figure.

Master of Public Administration Course Listings and Descriptions

Dordt's Master of Public Administration program is designed to equip those called to service in the public and nonprofit sector with the tools of stewardship, servant leadership, and discernment needed to achieve success in management and leadership roles. Each specialization requires a total of 36 credits for program completion.

Foundation (common to all specializations): MPA 501, 511, 512, 513, 521, 522, 531, 532, 580

Students must select one of the following specializations:

General: Foundation; three additional MPA courses.

Nonprofit Management: Foundation; MPA 551, 552, 553.

Police Administration: Foundation; MPA 541, 542, 543.

On petition, MPA 593 may be substituted for one or more specialization (non-Foundation) courses.

MPA 501	Introduction to Public Administration (3) Fall This course will survey the field of public administration with specific attention given to the development of public administration as a profession. The history of public administration as well as the major theoretical disagreements in the field between science and values will be covered in detail. Students will explore their own approaches to administration and public service in light of these theories.
MPA 511	Organizational Theory (3) Fall-alternate years This course will study contemporary theories and practices which undergird the management of organizations, with special emphasis on those in the public and nonprofit sector. This includes topics in organizational strategy and business planning, collaboration, leadership, developing and maintaining organizational culture, improvement and evaluation, and instituting/managing change.
MPA 512	Leadership (3).....Fall-alternate years, Summer-alternate years This course will examine the theory and practice of organizational leadership, with an emphasis on leadership in public and nonprofit organizations. This includes a study of the ethical dimensions of leadership as well as aspects of self-knowledge and evaluation that will help students develop effective personal leadership strategies.
MPA 513	HR Management (3) Fall-alternate years This course will introduce and discuss the major topics in Human Resource Management (HRM), particularly as they pertain to

employment in the public and nonprofit sector. This course will address the major HRM tasks of workforce design and planning, managing employee competencies, and managing employee attitudes and behaviors while moving through the employment cycle from recruitment, selection, and compensation to evaluation, training, development, and retention.

- MPA 514 Public Relations (3)**..... Various Terms-alternate years
This course will introduce the field of public relations and equip students with the tools they need to make wise, timely, and tactically sound decisions when in leadership roles, particularly in the public and nonprofit sector. Students will learn to identify their target audience and its characteristics while tailoring effective messaging which makes strategic use of varied media, including print, broadcast, electronic, trade, and social media. Emphasis will be placed on ethical practice and how values can shape an organizations relationship with its publics through case studies and other course assignments.
- MPA 515 Project Management (3)** Various Terms-alternate years
This course provides students with the principles and techniques of project management. Focus will be given to event and planning implementation as well as an exploration of technological tools available to assist in project management. Students will also learn about and apply theories of organizational change in the context of project management.
- MPA 516 Crisis Intervention (3)**..... Various Terms-alternate years
This course will introduce students to a new and growing field of literature on crisis intervention. Special attention will be paid to mental health issues, emergency preparedness and other crises that require coordinated responses and intervention. Students will learn about and apply best practices in crisis intervention in an organizational setting. Students will think critically about the role of the nonprofit and public sector in the community in times of crisis.
- MPA 521 Government and Bureaucracy (3)**..... Summer-alternate years
This course will study the development of public policy through political process. This involves a study of the theories behind public policy as well as a study of the various actors in the formation process. Special emphasis will be focused on the challenges of democratic governance as policy works from proposal to legislation, implementation, regulation, and evaluation.
- MPA 522 Budgeting and Public Finance (3)**..... Spring-alternate years
This course will introduce basic principles of budgeting and finance as it relates to the public and nonprofit sector. Students will gain competencies in reading, creating and developing budgets. Forecasting for future sustainability will be addressed in content and in course assignments.
- MPA 531 Quantitative Analysis and Program Evaluation (3)**..... Spring-alternate years
This course will build upon basic quantitative skills to develop a greater understanding of using quantitative analysis in research, both practical and academic, and in program evaluation. Developing skills in evaluating effective and efficient programs will be central to this course. Undergraduate work in statistics is a prerequisite for this course.
- MPA 532 Policy Analysis (3)**..... Summer-alternate years
This course will include the tools and frameworks of policy analysis. Theories of policymaking and analysis will be presented and utilized in course projects. Students will employ policy analysis tools to evaluate governmental or organizational policies.
- MPA 541 Police Administration (3)**..... Fall-alternate years
This course will equip students to develop and evaluate policies and procedures at various levels in police administration. Course-work includes a study of the history of police administration, police organization and leadership, the role of a police manager, and the role of civilian oversight. Emphasis will be placed on features of operations and management which are unique to police as compared to other business or government entities. May be offered concurrently with MPA 551.
- MPA 542 Evidence- and Community-based Policing (3)**..... Spring-alternate years
This course will focus on the development, operation, and evaluation of both evidence-based policing methods and community initiatives, including developing effective public-private partnerships in this area. Students will learn to develop effective crime-prevention programs through critical analysis of case studies and current research with a goal of identifying the key factors that influence effective policies and the challenges of implementation.
- MPA 543 Advanced Criminal Procedure (3)**..... Spring-alternate years
This course will foster a nuanced understanding of the logic and caselaw which animates the guarantees of the 4th, 5th, and 6th Amendments to the U.S. Constitution. Students will study foundational cases in the field, trace their development to modern standards, and discuss the decisions both made and anticipated which sit at the cutting edge of current law. Prerequisite: Undergraduate work or professional training in criminal procedure.
- MPA 551 Nonprofit Administration (3)**..... Fall-alternate years
This course will focus on administrative matters that are often unique to the nonprofit sector. Students will explore the nonprofit sector as a reflection of civil society creation and development. Topics such as volunteer management, commitment to mission and other management areas will be addressed. May be offered concurrently with MPA 541.

MPA 552	Grant Writing and Fundraising (3) Spring-alternate years This course will prepare students to pursue funding opportunities for nonprofit organizations. Event planning, social media campaigns and other activities of fundraising will be covered as well as an introduction into grant writing. Students will apply their learning with projects from their real-life work.
MPA 553	Nonprofit Law (3) Spring-alternate years This course provides an overview of the law as it relates to the nonprofit sector, specifically focusing on issues in tax, business entity, contract, and employment law. Emphasis will be placed on topics such as applying for and maintaining nonprofit status, structuring operations and joint ventures, and fiduciary duties.
MPA 580	Jurisprudence and Lawmaking (3) Summer This course will study the major philosophies of governance, with an emphasis on practical application and just lawmaking, particularly within a Kuyperian worldview. Students will be introduced to classical thought in this field while also studying contemporary application as an avenue for analysis and critical evaluation of the views of human nature, theories of change, and implementation of incentives that drive modern policymaking.
MPA 591-593	Individual Studies (1-3) Fall, Spring, Summer See page 120, Individual Studies

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ADMINISTRATIVE CABINET

Aaron Baart (2010), Dean of Chapel; B.A., Dordt College; M.Div., Regent College
John Baas (2005), Vice President for Advancement; B.A., Calvin College; M.B.A., Grand Valley State University
Stephanie Baccam (2017), Executive Director of Finance and Risk Management; B.A., Dordt College
Eric Forseth (2013), Provost; B.A., Northwest Nazarene University; M.S., University of Arizona; Ph.D., Ohio State University
Erik Hoekstra (2008), President; B.A., Trinity Christian College; M.B.A., Erasmus University; Ph.D., Iowa State University
Brandon Huisman (2013), Vice President for Enrollment and Marketing; B.A., Dordt College; M.B.A., Regent University
Howard Wilson (2013), Vice President and Chief Administrative Officer; B.S., LeTourneau University; M.Div., Providence Theological Seminary
Leah Zuidema (2007), Vice President for Online and Graduate Education; B.A., Calvin College; M.A., Michigan State University; Ph.D., Michigan State University

OTHER ADMINISTRATIVE STAFF

Adam Adams (2015), Director for Global Education; B.A., Truman State University; M.A., Union University; M.Div., Golden Gate Baptist Theological Seminary
Laura Andersen (2013), Technical Director, Technical Theatre Instructor; B.A., Dordt College; M.F.A., University of Idaho
Sam Ashmore (2018), Discipleship Coordinator; B.A., Dordt College
Beth Baas (2007), Director of Campus Health Services; B.S.N., Calvin College
Nathan Bacon (2019), Head Baseball Coach; B.A., Avila University; M.Ed., University of Missouri
Joe Bakker (2018), Director of Online Education; B.A., Dordt College; M.Ed., Dordt College
Rebecca Bleeker (2016), Stepping Stones Preschool Teacher; B.A., Dordt College
Susan Blom (2003), Theatre Arts Seamstress; B.A., Dordt College
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James Bolkema (1983), KDCR Music Director; B.A., Dordt College
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Alicia Bowar (2016), Associate Director of Alumni and Parent Relations; B.A., Dordt College
Jennifer Breems (2007), Director of Library Services; B.A., Dordt College; M.L.S., University of Illinois at Urbana-Champaign
Jake Brouwer (2019), Marketing Videographer; B.A., Dordt College

UNIVERSITY PERSONNEL: ADMINISTRATIVE PERSONNEL

Derek Buteyn (2013), Director of Residence Life; B.A., Dordt College; M.A., Bethel University
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Jonathan De Groot (2011), Director of Campus Ministries and Worship Arts; B.A., North Central University; M.Div., Bethel Seminary
Lora De Vries (2005), Director of Campus Store Services; B.A., Dordt College
Dianne De Wit (1996), Signature and Regional Events Coordinator; B.A., Dordt College
Ross Douma (2009), Director of Athletics; B.A., Northwestern College; M.A., Governors State University
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 David Vander Werf (1996), Director of Planned Giving; B.A., Dordt College
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 Mark Volkers (2005), Digital Media Production Instructor; B.R.E., Reformed Bible College; M.A., Wheaton Graduate School
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 Nathan Wolf (2015), Head Men's and Women's Cross Country Coach; B.A., Northwestern College; M.A., University of South Dakota
 John Wynstra (2015), Database Administrator; B.A., University of Wisconsin-Parkside; M.L.S., University of Wisconsin-Milwaukee; M.S., University of Northern Iowa
 Jeffrey Zomer (2009), Director of Recreation Center, Head Softball Coach; B.A., Dordt College
 Christian Zylstra (2017), KDCR Station Announcer and Sponsorship Coordinator; B.A., Dordt College

Faculty

FACULTY EMERITI

Pamela Adams, Ph.D., Professor of Education, Emerita 2010
 Joanne Alberda, M.S., Assistant Professor of Art, Emerita 2001
 Willis Alberda, Ph.D., Professor of Mathematics, Emeritus 2001
 Syne Altena, Ph.D., Professor of Health, Physical Education, and Recreation, Emeritus 2007
 Dallas Apol, Ph.D., Professor of Foreign Language, Emeritus 2000
 Arthur Attema, M.A., Assistant Professor of Business Education, Emeritus 2017
 Duane Bajema, Ph.D., Professor of Agriculture, Emeritus 2018
 Abraham Bos, M.A., Associate Academic Dean, Emeritus 1998
 Dennis De Jong, M.S., Assistant Professor of Computer Science, Emeritus 2014
 Martin Dekkenga, M.A., Associate Professor of Communication, Emeritus 1997
 Karen DeMol, Ph.D., Professor of Music, Emerita 2012
 Mary Dengler, Ph.D., Professor of English, Emeritus 2019
 George Faber, Ph.D., Professor of Education, Emeritus 2001
 Christian Goedhart, Ph.D., Professor of Agriculture, Emeritus 2015
 Merlyn Gulker, M.A., Associate Professor of Business Administration, Emeritus 1998
 David Helmstetter, M.S.W., Assistant Professor of Social Work, Emeritus 2003
 Robert Hilbelink, Ph.D., Professor of Accounting, Emeritus 2012
 Richard Hodgson, Th.M., Associate Professor of Planetary Sciences, Emeritus 2002
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 Calvin Jongsma, Ph.D., Professor of Mathematics, Emeritus 2013
 Wayne Kobes, Ph.D., Professor of Theology, Emeritus 2017
 Arnold Koekkoek, M.A., Associate Professor of History, Emeritus 1998
 John Kok, Ph.D., Dean for Research and Scholarship, Director of Andreas Center, Professor of Philosophy, Emeritus 2014
 James Koldenhoven, Ph.D., Professor of Theatre Arts, Dean of the Humanities, Emeritus 1997
 James Mahaffy, Ph.D., Professor of Biology, Emeritus 2014
 Rockne McCarthy, Ph.D., Vice President for Academic Affairs, Emeritus 2008
 Leonard Rhoda, Ed.D., Professor of Health, Physical Education, and Recreation, Emeritus 2005
 Joan Ringerwole, D.M.A., Professor of Music, Emerita 2005
 James Schaap, Ph.D., Professor of English, Emeritus 2012
 David Schelhaas, M.A., Assistant Professor of English, Emeritus 2008
 Jerelyn Schelhaas, M.A., Instructor of Theatre Arts, Emerita 2008
 Keith Sewell, Ph.D., Professor of History, Emeritus 2012

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Andrea Struyk, M.A., Assistant Professor of Education, Emerita 2000
John Struyk, Ph.D., Professor of Foreign Language, Emeritus 2000
Marlin Vanden Bosch, Ph.D., Professor of English, Emeritus 2000
Richard Vander Berg, M.S., Director of Athletics, Assistant Professor of Health, Physical Education, and Recreation, Emeritus 2009
Daryl Vander Kooi, Ed.D., Professor of Communication, Emeritus 2002
Dennis Vander Plaats, Ed.D., Professor of Education, Emeritus 2013
John Vander Stelt, Th.D., Professor of Theology and Philosophy, Emeritus 1999
Delmar Vander Zee, Ph.D., Professor of Biology and Environmental Studies, Emeritus 2009
John Van Dyk, Ph.D., Professor of Philosophy of Education, Emeritus 2006
Lorna Van Gilst, Ph.D., Professor of English, Emerita 2007
Jacob Van Wyk, M.F.A., Professor of Art, Emeritus 2014
Charles Veenstra, Ph.D., Professor of Communication; Emeritus 2016
Arnold Veldkamp, M.A., Associate Professor of Mathematics, Emeritus 1998
David Versluis, M.F.A., Professor of Art, Emeritus 2019
John Visser, Ph.D., Professor of Business Administration, Emeritus 2016
Ronald Vos, Ph.D., Professor of Agriculture, Emeritus 2015
Bernard Weidenaar, M.B.A., Assistant Professor of Business Administration, Emeritus 2008
Marvin Wielard, M.S., Assistant Professor of Computer Science, Emeritus 2007
Socorro Woodbury, Ed.D., Professor of Language Studies, Emerita 2012
John Zwart, Ph.D., Professor of Physics, Emeritus 2019
Carl Zylstra, Ph.D., College President, Emeritus 2012

FACULTY ASSEMBLY *(date in parenthesis indicates appointment year)*

Laura Andersen (2013), Technical Theatre Instructor, Technical Director; B.A., Dordt College; M.F.A., University of Idaho
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Joe Bakker (2018), Director of Online Education; B.A., Dordt College; M.Ed., Dordt College
Tara Boer (2012), Assistant Professor of Social Work; B.S.W., Dordt College; M.S.W., University of South Florida
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James Bos (1985), Registrar, Director of Institutional Research; B.A., Dordt College; M.S., Mankato State University
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Vaughn Donahue (2018), Instructor of Graphic Design; B.A., Northwestern College
Ross Douma (2009), Director of Athletics; B.A., Northwestern College; M.A., Governors State University

- Matthew Drissell** (2008), Professor of Art; B.A., Wheaton College; M.F.A., New York Academy of Art
- Rebekah Earnshaw** (2017), Assistant Professor of Theology; B.Eng., University of New South Wales; B.Div., Moore Theological College; M.A., Australian College of Theology; Ph.D., University of St. Andrews
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- Bill Harmsen** (2018), Head Women's Basketball Coach; B.A., University of Sioux Falls; M.Ed., University of Sioux Falls
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- Kimberly Hengeveld** (2008), Instructor of Education; B.A., Dordt College; M.Ed., Dordt College
- Craig Heynen** (2007), Professor of Health and Human Performance; B.A., Dordt College; M.S., Emporia State University; Ed.D., University of South Dakota
- Barbara Hoekstra** (1999), Professor of Education; B.A., Trinity Christian College; M.A., Western Michigan University; Ed.D., University of South Dakota
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- Jeremy Hummel** (2015), Professor of Agriculture; B.A., Dordt College; Ph.D., University of Alberta
- Michael Janssen** (2014), Associate Professor of Mathematics; B.S., University of South Dakota; M.S., University of Nebraska at Lincoln; Ph.D., University of Nebraska at Lincoln
- Anthony Jelsma** (2000), Professor of Biology; B.S., McMaster University; Ph.D., McMaster University
- Timothy Klein** (2008), Associate Professor of Business Administration; B.A., Dordt College; M.Ed., Dordt College
- Laurel Koerner** (2019), Associate Professor of Theatre Arts; B.A., Dordt College; M.A., Bowling Green State University; M.F.A., California Institute of Arts
- Patricia Kornelis** (2002), Professor of Education; B.A., Calvin College; M.A., University of South Dakota; Ed.D., University of South Dakota
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- Melissa Lindsey** (2017), Associate Professor of Mathematics; B.S., California Polytechnic State University; Ph.D., Purdue University
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- Brandon McCormick** (2018), Assistant Football Coach; B.A., Crown College; M.Ed., Dordt College
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- John Olthoff** (1989), Professor of Agriculture; B.A., Trinity Christian College; M.S., University of Minnesota; Ph.D., University of Nebraska at Lincoln
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- Howard Schaap** (2008), Professor of English; B.A., Bethel College; M.A., South Dakota State University; M.F.A., Seattle Pacific University
- Jay Shim** (2004), Professor of Theology; B.A., Calvin College; M.Div., Calvin Theological Seminary; Ph.D., Calvin Theological Seminary
- Joel Sikkema** (2012), Associate Professor of Engineering; B.A., Dordt College; B.S.E., Dordt College; M.S., Iowa State University; Ph.D., Iowa State University
- Randy Smit** (2010), Professor of Business Administration and Accounting; B.A., Northwestern College; M.B.A., University of Phoenix; C.P.A.; D.B.A., California Southern University
- Ryan Smit** (2017), Instructor of Music; B.A., Dordt College; M.Mus., Arizona State University
- Edward Starkenburg** (2005), Professor of Education; B.A., Dordt College; M.Ed., Sioux Falls College; Ed.D., University of Northern Iowa
- Craig Stiemsma** (2003), Professor of Health and Human Performance; B.A., Dordt College; M.A., University of South Dakota; Ed.D., University of South Dakota
- Shaun Stiemsma** (2019), Associate Professor of English; B.A., Calvin College; M.A., The Catholic University of America; Ph.D., The Catholic University of America
- Jeffrey Taylor** (2011), Professor of Political Science; B.A., Northwestern College; M.A., University of Iowa; M.A., University of Missouri; Ph.D., University of Missouri
- Mark Tazelaar** (1997), Professor of Philosophy; B.A., Trinity Christian College; M.A., Loyola University; Ph.D., Loyola University
- Teresa Ter Haar** (2005), Professor of Theatre Arts; B.A., Calvin College; M.A., Bowling Green State University; Ph.D., Bowling Green State University
- Kevin Timmer** (2003), Professor of Engineering; B.S.E., Dordt College; M.S., Iowa State University; Ph.D., Iowa State University
- Nathan Tintle** (2011), Professor of Statistics, Director for Research and Scholarship; B.S., State University of New York at Albany; M.S., State University of New York at Stony Brook; Ph.D., State University of New York at Stony Brook
- Leendert van Beek** (2000), Professor of Language Studies; Kandidaat, Leiden University; Doctorandus, Leiden University; Doctorandus, Leiden University; Ph.D., Capella University
- Sandy Vanden Bosch** (2017), Instructor of Business Administration; B.A., Dordt College; C.P.A.; M.B.A., Oklahoma Christian University
- Kathryn Vander Veen** (2006), Professor of Nursing; B.S.N., University of Utah; M.S.N., Uniformed Services University; Ph.D., South Dakota State University
- Justin Vander Werff** (2008), Associate Professor of Engineering; B.S.E., Dordt College; M.S., Iowa State University; Ph.D., Iowa State University
- Nolan Van Gaalen** (1983), Professor of Engineering; B.S., Calvin College; B.S.E., University of Michigan; M.S., University of Alberta; Ph.D., Iowa State University
- Brian Van Haaften** (2018), Head Men's Basketball Coach; B.A., Northwestern College; M.A., Drake University
- Timothy Van Soelen** (2005), Professor of Education, Director of the Center for the Advancement of Christian Education; B.A., Dordt College; M.A., Azusa Pacific University; Ed.D., University of South Dakota
- Kathleen Van Tol** (2009), Associate Professor of Education; B.S., Calvin College; M.A., Calvin College; Ed.D., Western Michigan University
- Jan van Vliet** (2011), Professor of Economics; B.A., Wilfrid Laurier University; M.A., Queen's University; Th.M., Tyndale University College and Seminary; Ph.D., Westminster Theological Seminary
- Kyle Van Wyk** (2018), Performance Coach; B.A., Dordt College; M.S.Ed., Wayne State College
- Bruce Vermeer** (2015), Professor of Psychology; B.A., Calvin College; M.A., Biola University; Psy.D., Biola University
- Channon Visscher** (2013), Associate Professor of Chemistry and Planetary Sciences; B.A., Dordt College; M.A., Washington University; Ph.D., Washington University
- Mark Volkers** (2005), Digital Media Production Instructor; B.R.E., Reformed Bible College; M.A., Wheaton Graduate School
- Dale Vos** (2019), Instructor of Agriculture Operations; B.A., William Penn University; M.Div., Western Theological Seminary; M.B.A., Lakeland University
- Sacha Walicord** (2016), Professor of Business Administration; M.A., Greenville Presbyterian Theological Seminary; LL.M., Johannes Kepler University Linz; Ph.D., Johannes Kepler University Linz
- David Westfall** (2019), Assistant Professor of Theology; B.A., Calvin College; M.Div., Gordon-Conwell Theological Seminary; Ph.D., University of St. Andrews
- Nathan Wolf** (2015), Head Men's and Women's Cross Country Coach; B.A., Northwestern College; M.A., University of South Dakota
- Jason Wyenberg** (2018), Instructor of Physics and Engineering; B.A., Dordt College; B.S.E., Dordt College
- Melanie Wynja** (2017), Instructor of Nursing; B.S., Briar Cliff University; M.S., Grand Canyon University
- Dale Zevenbergen** (2008), Instructor of Business Administration; B.A., Dordt College; M.B.A., University of Phoenix
- Joshua Zhu** (2017), Assistant Professor of Chemistry; B.S., Lanzhou University; M.S., Lanzhou University; Ph.D., Georgia State University
- Ryan Zonnefeld** (2009), Professor of Education; B.A., Dordt College; M.A., University of South Dakota; Ph.D., Iowa State University
- Valorie Zonnefeld** (2009), Associate Professor of Mathematics; B.A., Dordt College; M.Ed., Dordt College; Ed.D., University of South Dakota
- Leah Zuidema** (2007), Vice President for Online and Global Education; B.A., Calvin College; M.A., Michigan State University; Ph.D., Michigan State University

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Art	8	Academic Enrichment Center	2	Advancement Office	9	Baseball Diamond	20
Biology	3	Admissions	1	All Seasons Center	24	Dordt Prairie	38
Business Ed./Accounting/Econ	1	Advancement/Development	9	Alumni House	6	Football Field	22
Chem/Physics/Planetary Science	3	Alumni/Church/Parent Relations	9	B.J. Haan Auditorium	33	Open Space Park	25
Communication/Digital Media	8	Athletics	28	Business Office	9	Outdoor Track	22
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Education	8	Box Office	7	Campus Health Services	31	Softball Diamond	21
Engineering	3	Business Office	9	Central Heating Plant	11	Tennis Courts	23
English	8	Career Development Center	9	Clock Tower	37	Visitor Parking	5
Language Studies	8	Computer Services	7	Computer Services	7		
Health and Human Performance	28	Copy Center	8	Covenant Residence Hall	30		
History	8	Counseling	31	Defender Grille	1		
Math/Statistics/Actuarial Science	3	Dean of Chapel	1	De Witr Gymnasium	27		
Music	34	Events	1	De Yager Activity Center	1		
Nursing	17	Financial Aid	1	Dining Hall	14		
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Psychology	8	Information Desk	1	John and Louise Hulst Library	2		
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				Vermeer Business Center	1		
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				Zylstra Nursing Education Building	17		

Telephone Directory

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For specific information contact:

Office of the Academic Affairs	722-6333	Academic matters, curriculum, and instruction
Office of Admissions	722-6080	Admissions, catalogs, application forms
Office of Business Affairs	722-6010	Payment of accounts, general business matters
Office of Advancement	722-6020	Alumni relations, career development services, church relations, development, grants, news bureau, publications, public relations
Office of Financial Aid	722-6087	Scholarships, grants, loans, student employment
Office of Human Resources	722-6011	Hiring, benefits, government compliance, immigration
Office of the President	722-6002	General policies and interests of the college
Office of the Registrar	722-6030	Student records, GPA
Office of Student Services	722-6070	Housing, health and welfare of students, student organizations
Campus Health Services	722-6990	Student health issues, immunizations, personal counseling
Dean of Chapel	722-6079	Pastoral counseling, spiritual activities

Department Chairpersons

Agriculture	Gary De Vries	722-6271
Art and Design	Matthew Drissell	722-6373
Biology	Tony Jelsma	722-6278
Business Administration	Brian Hoekstra	722-6348
Chemistry	Carl Fictorie	722-6283
Christianity and Popular Culture	Mark Tazelaar	722-6366
Communication	Mark Volkers	722-6231
Computer Science	Kari Sandouka	722-6252
Criminal Justice	Donald Roth	722-6255
Education	Timothy Van Soelen	722-6228
Engineering	Ethan Brue/Justin Vander Werff	722-6034/722-6291
English	Joshua Matthews	722-6250
Environmental Studies	Robert De Haan	722-6220
Health and Human Performance	Craig Stiemsma	722-6309
History	Paul Fessler	722-6254
Language Studies	Leendert van Beek	722-6261
Mathematics and Statistics	Thomas Clark	722-6287
Music	John MacInnis	722-6202
Nursing	Deb Bomgaars	722-6689
Philosophy	Mark Tazelaar	722-6366
Physics/Astronomy	Jason Wyenberg	722-6285
Political Science	Jeff Taylor	722-6335
Pro-Tech	Joel Sikkema	722-6426
Psychology	Mark Christians	722-6262
Social Work	Erin Olson	722-6359
Theatre Arts	Teresa Ter Haar	722-6207
Theology	Rebekah Earnshaw	722-6332