# WEST DELAWARE HIGH SCHOOL



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#### WEST DELAWARE HIGH SCHOOL 605 NEW STREET MANCHESTER, IOWA 52057

Parents/guardians who have specific questions about the program of studies and enrollment procedures are invited to e-mail or call 563-927-3515 and ask for one of the following people:

#### **Principal's Office**

Tim Felderman, Principal timfelderman@w-delaware.k12.ia.us

Matt Weis, Assistant Principal/Activities Director mattweis@w-delaware.k12.ia.us

#### **Counselor's Office**

Shelby Piersch shelbypiersch@w-delaware.k12.ia.us

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#### WEST DELAWARE COUNTY COMMUNITY SCHOOL DISTRICT Annual Notice of Nondiscrimination

Code No. 602

The West Delaware County Community School District offers career and technical programs in at least four of the following areas of study:

- Agriculture, Food and Natural Resources
- Business, Finance, Marketing and Management
- Human Services
- Applied Sciences, Technology, Engineering and Manufacturing
- Health Sciences
- Information Solutions

It is the policy of the West Delaware County Community School District not to discriminate on the basis of race, color, national origin, gender, disability, religion, creed, age (for employment), marital status (for programs), sexual orientation, gender identity and socioeconomic status (for programs) in its educational programs and its employment practices. There is a grievance procedure for processing complaints of discrimination. If you have questions or a grievance related to this policy please contact Tim Felderman, West Delaware High School, 605 New Street, Manchester, Iowa 52057, 563-927-3515, extension 301, timfelderman@w-delaware.k12.ia.us.

#### EDUCATIONAL PLANNING

Of the required 56 credits needed for graduation, students must earn a total of 33 credits in six prescribed areas of study: English Language Arts, Math, Physical Education, Science and Social Studies. This requirement provides every student with a basic core of general education and meets all criteria established by the State Code of Iowa, the Department of Public Instruction, and the North Central Association.

Students are encouraged to plan carefully and enroll in courses which best meet their individual needs and interests. Tests may be required for college admission, scholarships, placement, or admission to vocational or technical schools. It is the responsibility of the student to be aware of the information necessary to carry out their future plans. Students are encouraged to discuss individual situations with their counselor and to participate in vocational, career, and post-secondary planning activities.

Freshmen, Sophomores, and Juniors must carry a minimum of 4 credits each term. Seniors who qualify for open campus must carry a minimum of 3 credits per term. Those seniors who do not qualify for open campus must carry a minimum of 4 credits each term. Students enrolled in Open Campus cannot utilize a PE Waiver in the same academic year.

#### **REQUIREMENTS FOR GRADUATION** West Delaware High School

I. Credit Requirements

West Delaware High School students must complete the following for a minimum of 56 credits to be eligible to graduate.

All graduation requirements must be met by all students, and the prerequisites must be completed by all students. At times, extenuating circumstances arise which necessitate an alternative graduation plan. The graduation plan will be developed and approved by school district administration.

Anyone applying for early graduation must fulfill the credits needed, and formally apply for early graduation through the high school principal.

Iowa Statewide Assessment of Student Progress (ISASP) scores can affect which classes a student may take and in what order the student may take the courses.

1 term=1 credit with the exception of skinny classes 1 skinny class=0.5 credit per term

Recommended sequence of courses:

A.	English Language Arts Grade 9 Grade 10 Grade 11	8 terms required (8 credits) English I or Advanced English I (2 terms) English II or Advanced English II (2 terms) English III or Advanced English III (2 terms) Two English elective credits (2 terms)
B.	Math	8 terms required (8 credits) Algebra I or Integrated Math I (2 terms) Geometry or Integrated Math II (2 terms) Algebra II or Integrated Math III (2 terms) Statistics or Statistical Analysis (2 terms)
C.	Science Grade 9	6 terms required (6 credits) Science Interactions (2 terms) Biology or Concepts of Biology (2 terms) Chemistry I or Concepts of Chemistry (2 terms)
D.	Social Studies Grade 9 Grade 10 Grade 11 Grade 12	7 terms required (7 credits) Global Studies (2 terms) United States History (2 terms) Introduction to Sociology or Introduction to Psychology (1 term) American Government (2 terms)

E.	Physical Education	4 terms required (4 credits)
	Grades 9-12	One credit is required each year

- II. Additional Requirements
  - Cardiopulmonary Resuscitation (CPR)
  - Prior to graduation, the district will advise students on how to successfully complete the Free Application for Federal Student Aid (FAFSA).
  - Beginning with the Class of 2025, students will complete a portfolio of artifacts aligning with West Delaware's Career Ready Skills. The portfolio will include documentation of a Work Based Learning Experience by the student. Examples of a Work Based Learning Experience include but are not limited to:
    - Apprenticeship
    - Course with an embedded Pre-Apprenticeship
    - Multi-Occupational Careers (MOC) course
    - Agricultural Occupation Employment Experience (AOEE) course
    - Career Exploration course
    - Foods Internship course
    - College and Career Connection program
- III. Electives

All electives are given one credit per term unless otherwise stated in this booklet. All students taking electives should make sure that teacher's approval and/or prerequisites have been satisfied.

IV. Retaking a Required Course

Required courses that are not passed must be retaken as soon as it can be arranged. It is the student's responsibility to review their credit status and arrange, with the counselor, plans to resolve any credit deficiencies that may exist.

- V. CPR and PE may be waived by the superintendent with no further Board action if the Iowa Department of Education gives districts that authority.
- VI. Students who complete a regular session in the Legislative Page Program of the general assembly at the state capitol will receive social studies credits. They may also be excused from physical education courses for the academic year.

#### GRADE POINT AND CLASS RANK

In determining a student's grade point and class rank, the grading system and its numerical equivalent are as follows:

А	4.00	С	2.0
A-	3.667	C-	1.667
B+	3.333	D+	1.333
В	3.0	D	1.0
B-	2.667	D-	.667
C+	2.333	F	0

#### **COLLEGE ADMISSION REQUIREMENTS**

Course Requirements for Admission to Iowa's Regent Universities (Iowa State University, University of Iowa, University of Northern Iowa)

To encourage you to get the most out of your high school experience and to ensure that you are academically well prepared for college study, Iowa's Regent Universities have established a set of course requirements for admission. By meeting these requirements, you will satisfy not only the high school course requirements for admission to a state university in Iowa, but also the requirements for most other colleges and universities you might want to attend.

These requirements are just minimums for admission. You may need to take additional college prep courses in high school. For example, if you plan to pursue a degree in Engineering, it is recommended to take as many mathematic courses beyond secondyear Algebra as you can during high school. Also, talk with your counselor to see if you can earn college credits during high school through Concurrent Credit Courses and Placement in College Credit/Post-Secondary Enrollment Options courses at nearby colleges.

The following chart (page 6) outlines the high school course requirements for admission to each of Iowa's Regent Universities. While the requirements are fundamentally similar, some differences exist that reflect the individuality of the three universities.

#### **COLLEGE ADMISSION - Minimum Course Requirements**

	Iowa State University	The University of Iowa	University of Northern Iowa	Optimum Recommendations for Success
English	<b>4</b> years emphasizing writing, speaking, reading, as well as an understanding and appreciation of literature.	<b>4</b> years with an emphasis on the analysis and interpretation of literature, composition and speech.	<b>4</b> years including one year of composition, also include one year of speech, communication or journalism.	4 years with an emphasis on the communication skills of writing, reading and listening and the analysis and interpretation of literature. In addition, courses in journalism and media literacy will be valuable. Extracurricular activities in debate, speech contest, newspaper and yearbook will further develop essential competencies.
Math	<b>3</b> years including at least one year each of algebra, geometry and advanced algebra.	<ul> <li>3 years including two years of algebra and one year of geometry for admission to the College of Liberal Arts and Sciences.</li> <li>4 years including two years of algebra, one year each of geometry and higher math (trigonometry, analysis or calculus) for admission to the College of Engineering.</li> </ul>	<b>3</b> years including the equivalent of algebra, geometry and algebra II.	<b>4</b> years one in each year of high school. Advanced courses in algebra and trigonometry are optimal. Calculus and statistics courses are also good and will contribute in the development of your higher-level analytical skills.
Natural Science	<b>3</b> years including at least two years of courses which emphasize elements of biology, chemistry or physics.	<ul> <li>3 years including courses in physical science, biology, chemistry, environmental science and physics for admission to the College of Liberal Arts and Sciences.</li> <li>3 years with at least one year each in chemistry and physics for admission to the College of Engineering. Nursing, three years including one year each of</li> </ul>	<b>3</b> years including courses in general science, biology, chemistry, earth science or physics. Laboratory experience is highly recommended.	4 years one in each year of high school. To be better prepared, take at least one year each of biology, chemistry and physics. These can be taken in any order and may be taught productively in either a separate or an integrated fashion, depending on your school's offerings.
Social Studies	<ul> <li>2 years for admission to Colleges of Agriculture and Life Sciences, Business, Design, Engineering and Human Sciences.</li> <li>3 years for admission to the College of Liberal Arts and Sciences.</li> </ul>	<ul> <li>biology, chemistry and physics.</li> <li><b>3</b> years with U.S. history and world history recommended for admission to the College of Liberal Arts and Sciences.</li> <li><b>2</b> years with U.S. history and world history recommended for admission to the College of Engineering.</li> </ul>	<b>3</b> years including courses in anthropology, economics, geography, government, history, psychology or sociology.	<b>3</b> years is essential, but four is better. Take at least one year each of US and world history. Additional courses in anthropology, economics, political science, psychology and sociology provide an important understanding of our political, social and economic institutions.
World Language	2 years of a single world language for admission to the College of Liberal Arts and Sciences and the College of Engineering.	2 years of a single world language are required for admission. For many degrees, the fourth year of proficiency is required for graduation. Nursing – Minimum second-level proficiency in one world language.	World language courses are not required for admission. However, two years of world language in high school with a C- or above in the last term will meet the university graduation requirement.	<b>4</b> years of single world language. By taking world language during all four years of high school, you'll go beyond the basic skills and begin to use the language and reinforce your fluency.
Other Courses	Specific elective courses are not required for admission.	Specific elective courses are not required for admission.	<b>2</b> years of additional courses from the required subject areas, world language or the fine arts.	Explore! Courses in the fine arts, performing arts, computers or technology will help round out your high school experience. Your future field of concentration or career may lie in one of those areas. Follow your interests, talents and the strengths of your school. Remember to choose courses with high academic standards.

## ACCEPTED COURSES TO IOWA'S REGENT UNIVERSITIES REGENT ADMISSION INDEX (RAI)

Iowa Regent Schools have adopted a "Test Optional" RAI calculation that looks at each student individually determining admission based on cumulative high school GPA and number of RAI approved courses taken in high school. Although traditional RAI score remains in place as the primary means for admission, the Test Optional policy allows for flexibility for students and universities. For more information in determining if this is an appropriate option for your situation, speak with the institution in which you are seeking admission.

College freshman applicants who wish to enter Iowa's Regent Universities will be held to the Regent Admission Index (RAI) requirement. The RAI score is based upon three factors: ACT composite score, high school cumulative grade point average, and the number of years of high school courses completed in the core subject areas of English, Mathematics, Science, Social Studies and World Language.

#### **RAI CALCULATION:**

(3 x ACT composite score)

- + (30 x high school cumulative GPA)
- + (5 x total number of years of RAI-approved high school courses completed in the core subject areas) Total = RAI score

Note: For purposes of calculating the RAI, ACT composite score has a top value of 36 (SAT scores will be converted to ACT composite equivalent); high school GPA is expressed on a 4-point scale; and number of years of approved high school courses completed in the core subject areas is expressed in terms of years or fractions of years of study.

To calculate your own expected RAI, go to www.regents.iowa.gov/RAI.

Iowa high school graduates must achieve a Regent Admission Index (RAI) score of at least 245 and take the minimum number of required high school courses to qualify for automatic admission as freshmen to Iowa State University, the University of Northern Iowa, and the University of Iowa Liberal Arts and Sciences. Students who achieve a score less than 245 will be considered for admission on an individual basis.

The index places greater emphasis on your high school course selections. The more core courses you take the higher your RAI. Plan your high school courses carefully.

Courses that count as core courses for use in determining entry into the Regent Universities are **not** the same as those approved by the NCAA Clearinghouse.

The following courses will be accepted at Iowa State University, University of Iowa and the University of Northern Iowa to meet minimum core course requirements.

#### **Regent Admission Index (RAI) Core Course List**

World Language	English	Math	Science	Social Studies
Spanish I	English I	Algebra I	Science Interactions	United States History
Spanish II	Advanced English I	Algebra II	Biology	Mod. Amer. History-
Spanish III	English II	Pre-Calculus Functions	Chemistry I	1980s to Present
Spanish IV	Advanced English II	Geometry	Chemistry II	Mod. Amer. History
Spanish V	English III	Pre-Calculus I	Chemistry III	Intro. to Psychology
French I	Advanced English III	Calculus I	Physics	American Government
French II	Advanced Writing	Statistics	Principles of	Modern Social
French III	Creative Writing	Statistical Analysis	Engineering	Problems
French IV	Public Speaking	Integrated Math I	Anatomy & Phys. I	Intro. to Sociology
French V	Journalism	Integrated Math II	Anatomy & Phys. II	Global Studies
	Intro. to Literature	Integrated Math III	Astronomy	Regions of the World
	Composition I	-	Environmental Science	-
	Contemporary			
	Literature			
	Film and Literature			

#### FOR PROSPECTIVE STUDENT ATHLETES: NCAA Clearinghouse Courses

This list of West Delaware courses comes from the list of approved courses from the NCAA Clearinghouse. Most private colleges will look at other courses on an individual basis.

Mathematics Algebra I	Natural/Physical Science	Social Studies American	Additional Courses accepted by NCAA
Algebra II	Anatomy &	Government	French I
Pre-Calculus	Physiology I	Global Studies	French II
Functions	Anatomy &	Intro. to Sociology	French III
Geometry	Physiology II	Intro. to Psychology	French IV
Pre-Calculus I	Astronomy	Modern American	French V
Statistics	Biology	History 1980s-	Spanish I
Statistical Analysis	Chemistry I	Present	Spanish II
Calculus I	Chemistry II	Modern American	Spanish III
Integrated Math I	Chemistry III	History	Spanish IV
Integrated Math II Integrated Math III	Science Physics	Modern Social Problems Regions of the World United States History	Spanish V
	Algebra I Algebra II Pre-Calculus Functions Geometry Pre-Calculus I Statistics Statistical Analysis Calculus I Integrated Math I Integrated Math II	Algebra IScienceAlgebra IIAnatomy &Pre-CalculusPhysiology IFunctionsAnatomy &GeometryPhysiology IIPre-Calculus IAstronomyStatisticsBiologyStatistical AnalysisChemistry ICalculus IChemistry IIIntegrated Math IEnvironmentalIntegrated Math IIIScience	Algebra IScienceAmericanAlgebra IIAnatomy &GovernmentPre-CalculusPhysiology IGlobal StudiesFunctionsAnatomy &Intro. to SociologyGeometryPhysiology IIIntro. to SociologyPre-Calculus IAstronomyModern AmericanStatisticsBiologyHistory 1980s-Statistical AnalysisChemistry IPresentCalculus IChemistry IIModern AmericanIntegrated Math IChemistry IIIHistoryIntegrated Math IIEnvironmentalModern SocialIntegrated Math IIIScienceProblemsPhysicsRegions of the World

To check up to date information for the NCAA go to <u>www.ncaaclearinghouse.net</u>. West Delaware code is 162700 (same as ACT).

#### **REGISTRATION PROCEDURE**

All students will register for the four terms of classes for 2024-2025 by using the following procedure:

- 1. During class meetings, all students will be given access to the Program of Studies and registration directions.
- 2. Students will follow the registration procedures in filling out their course requests.
- 3. Registration sheet will need to be signed by student's guardian and returned to the High School Counseling Office.
- 4. High school students will register online for courses. Counselors will meet with 8<sup>th</sup> grade students for registration. Advisors will meet with 9<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> grade students. Any student can speak to counselors at any time for assistance with scheduling.

#### **Special Notes:**

- The registration process is designed to make every effort to accommodate the student's request for courses. It should be understood that there is no way to determine in advance which periods of the day courses will be offered or which teacher will teach which course.
- Because class sizes and teacher assignments are based on the registration process, students will not be allowed to alter their course requests once the registration process is completed.
- It is the student's responsibility to make sure they are successfully completing the requirements for graduation.
- Grade levels throughout this book are recommended unless other requirements apply.
- Requirement accommodations for courses need the approval of the building principal.

#### SCHEDULE CHANGES

Students will not be allowed to alter their course requests once the registration process is completed unless extenuating circumstances exist. A two-term course may not be dropped at the end of the first term of the course unless the student has the approval of the teacher, High School Counseling Office, and the principal. Students must be scheduled for all four blocks for each of the four terms in the 9, 10, 11th grades. The only exception will be those 12th grade students who are able to take 3 blocks and open campus should they qualify. Students who do not qualify for open campus must sign up for a 4th class. Students are required to make all schedule changes for the school year during the first three weeks of the school year, with deadline date determined by administration. Term one changes need to be completed during the first three days of the term. Schedule changes after this time period will need approval from the building principal. Exceptions may include:

- Student lacks the prerequisite, as stated in the Program of Studies, for a course.
- · Student fails one term of a two-term course and needs to be rescheduled.
- Student lacks a course that is required for college entrance and cannot get the needed course before graduation.
- A senior who has met the requirements for open campus in the previous grading period and is taking four classes may drop one of the classes and elect to take open campus. This must be done within the first six school days of the term.
- A senior who has not met the requirements for open campus.
- Student is missing a course needed toward graduation.
- Student earns a qualifying ALEKS Assessment score after the scheduling deadline.

#### AGRICULTURE, FOOD AND NATURAL RESOURCES

Registered Apprenticeship opportunities are available in Ag Service Worker (Agronomy) and Gas Utility Worker through application. See instructor for details.

Recommended course sequence for Animal Science and Agronomy:

Animal Science	Agronomy
Courses: (suggested time frame)	Courses: (suggested time frame)
Agriculture Exploration (9, 10, 11, 12)	Agriculture Exploration (9, 10, 11, 12)
Wildlife and Natural Resources (9, 10, 11, 12)	Horticulture (9, 10, 11, 12)
Agriculture Business (10, 11, 12)	Wildlife and Natural Resources (9, 10, 11, 12)
Agriculture Marketing (10, 11, 12)	Agriculture Business (10, 11, 12)
Animal Science (11, 12)	Agriculture Marketing (10, 11, 12)
Agronomy (11, 12)	Agronomy (11, 12)
Immediate Employment Skills	Immediate Employment Skills
Hog Confinement Employment	Seed Delivery
Feedlot Employment	Crop Supply Delivery
Dairy Production Employment	Crop Scouting
Feed Mill Employment	Agronomic Production Employment
Post-Secondary	Post-Secondary
West Delaware courses provide a solid	West Delaware courses provide a solid foundation for future
foundation for future employment in animal	employment in agronomy leading to a diploma, Associate of Arts
science leading to a diploma, Associate of Arts	degree and/or a Bachelor's degree.
Degree and/or a Bachelor's degree.	
Future Careers (after post-secondary education)	Future Careers (after post-secondary education)
Veterinarian	Agronomist
Conservation Officer	Agricultural Chemical, Fertilizer, and Seed Rep.
Animal Control	Extension Agent
Farm Manager	Crop Improvement Representative
Zoologist	Seed Analyst

#### **Agriculture Exploration**

One Term Grades 9, 10, 11 or 12

Students will study a brief overview of different facets of the agricultural industry. This includes units of animal/plant science, natural resources, communication, and agricultural technology. Students will explore FFA and its potential leadership opportunities. Each student will also develop plans for their Supervised Agricultural Experiences and set goals for growth and development of those projects.

\*This class requires students to travel to the Animal Science lab on West Delaware's property. Students may be responsible for their own transportation. Parental approval is required. If transportation is a barrier for this class, please contact the instructor.

#### **Agricultural Issues and Perceptions**

Prerequisite: Agriculture Exploration

This upper-level course will put student knowledge of the agriculture industry to work through investigations of the industry on the local, state, national, and international levels. Historical agricultural events as well as current events will be discussed to show the interaction of other countries with the production of food, fiber, and fuel commodities.

#### Horticulture

Introductory horticulture principles will be taught in this course. Students will learn the basics of plant science including parts of the plant, environmental requirements for plant growth, and career exploration in horticulture. Students will be involved in the selection, planting, and care of flower and vegetable plants. Students will be involved in exterior landscape design and maintenance, as well as floral design projects.

Wildlife and Conservation Management	One Term
_	Grades 9, 10, 11 or 12

Wildlife and natural resources will provide the students with a history of our natural resources as well as the conservation of soil, water, forests, and air. Topics will also include wildlife management including hunting and fishing laws and safety.

One Term Grades 9, 10, 11 or 12

One Term Grades 9, 10, 11 or 12

One Term Grades 10, 11 or 12

This course will prepare students for a lifetime of financial management in agriculture business, general business and personal finance. Subject matter includes financial records including balance sheets, income statements, cash flow summaries and budgets and analysis of these records.

#### **Agriculture Marketing**

This course will prepare students for marketing of agricultural products. Basic economic principles and how they relate to marketing agri-products will be covered. Investment analysis also with financing are other topics of study in this course.

Animal Science AGS:114 and AGS:101	One Term
NICC Concurrent Credit - 4 college credits	Grades 11 or 12

This course combines two NICC concurrent credit courses (AGS:114 and AGS:101) and students will receive a grade for each. AGS:114 Survey of the Animal Industry - 2 college credits AGS:101 Working with Animals - 2 college credits

This course will overview the animal science industry by exploring breeds, basic management, and farm animal marketing. Topics include beef and dairy cattle, companion animals, horses, poultry, sheep, and swine. The course's intent is to give practical experience working with dairy, beef, sheep, goats, horses, poultry, and companion animals. Additionally, students will interview successful business owners in each of these areas while touring their facilities. Students will be responsible for the care of animals at the West Delaware Animal Lab, which is near the school district bus barn.

\*This class requires students to travel to the Animal Science lab on West Delaware's property. Students may be responsible for their own transportation. Parental approval is required. If transportation is a barrier for this class, please contact the instructor.

#### **Principles of Agronomy AGA:114**

NICC Concurrent Credit - 3 college credits

Agronomy is the introductory principles of plant-soil-climate relationships in crop production, designed after a similar course at Iowa State University, and uses many of the same materials. The course introduces students to the principles of plant, soil, and climate relationships in crop production. Areas emphasized in the course include plant structure and growth, genetics, reproduction, and integrated pest management. Students will take an in-depth look at the life cycle of plants and plant classification. By successfully completing this course, students will receive an ag service worker (agronomy) preapprenticeship certificate of completion.

Agricultural Occupation Employment Experience (AOEE)	One Term (May take more than once) 15 hrs/wk on the job required
	One credit per term
	Grades 11 or 12

Work based learning opportunities will allow students an opportunity to apply skills and knowledge obtained in school to future careers. A contract will be drawn up between the student, instructor, parent/guardian, and AOEE station supervisor. Placement will be on an agribusiness or farm in the Manchester area. It is recommended that a student seek a workstation outside that of the family or close relative. If a workstation is requested within a family or close relative, school administrative approval is required. The student is to use this time as a learning experience and not as a "hired hand." Records will be kept as well as any other assignments deemed necessary by the instructor. Students are responsible for finding their placement and will not be granted access to the course unless placement is arranged prior to the course starting. Placement should be arranged prior to the first day of the course. For scheduling purposes, AOEE will be placed in the student's schedule during first or fourth block and can be paired with an Open Campus.

\*This class requires students to travel off school grounds to the assigned worksite and meeting locations. Students are responsible for their own transportation. Parental approval is required. If transportation is a barrier for this class, please contact the instructor.

One Term Grades 10, 11 or 12

One Term Grades 11 or 12

#### APPLIED SCIENCES, TECHNOLOGY, ENGINEERING AND MANUFACTURING Registered Apprenticeship opportunities are available in Welding and Auto Trades through application. See instructor for details.

General requirements and fees:

There is no charge for required projects in a first-level course. Students will be required to pay for any materials and supplies they use on any activities that go beyond the general requirements of the course. This could include repairs for cars, the cost of lumber, or metal in an advanced level course.

#### Recommended course sequence for Technical Service, Construction, General Mechanics, Engineering Related, and Manufacturing:

TECHNICAL SERVICE		CONSTRUCTION		
Courses: (suggested time fr	ame)	Courses: (suggested time frame)		
Construction Trades (9/10/1	1/12)	Drafting I (9/10) Cabinet Making (9/10/11/12)		
		Basic Carpentry (9/10) Construction Trades (9/10/11/12)		
		Woodworking (10/11)		
		Wood Production (9/10/11/12)		
Immediate employment ski	<u>lls</u> :	Immediate employment skills:		
Electrical assembler		Carpenter		
Residential electrician with s	upervision	Roofer with supervision		
Service technician				
Post-Secondary:		Post-Secondary:		
WD courses serve as a solid	foundation	WD courses serve as a solid foundation		
for future work in Drafting le		for future work in construction leading		
to a diploma, Associate of A	rts degree or a	to a diploma or Associate of Arts degree		
four-year Bachelor's degree.		in Construction Technology.		
Future jobs (after post-sec. edu.)		Future jobs (after post-sec. edu.):		
Auto Electrical Systems	Computer Technician	Construction Technician		
Specialist	Robotics Technician	Construction Management		
HVAC Technician	Telecommunications	Building Maintenance		
Electronics Maintenance	Technician	HVAC Technician		
Electronics-Biomedical				

GENERAL MECHANICS	ENGINEERING RELATED	MANUFACTURING
Courses: (suggested time frame)	Courses: (suggested time frame)	Courses: (no suggested time frame)
Exploring Technology (9/10) Auto Ownership (10) Autos I (10/11) Autos II (10/11) Autos III (10/11)	Drafting I (9/10) Drafting II (11/12) CAD Exploration (9/10/11/12)	Drafting Intro to Stick Welding Intro to MIG Welding Basic Gas Metal Arc Welding Shielded Metal Arc Welding & Flame & Plasma Cutting Industrial Welding Welding Fundamentals
Immediate employment skills	Immediate employment skills:	Immediate employment skills:
Entry level auto technician with supervision	Entry level draftsman with supervision	Welding Apprentice (Junior Standing) Sheet metal fabricator Welder with supervision
<b><u>Post-Secondary</u>:</b> WD courses serve as a solid foundation for future work in General Mechanical leading to a diploma articulated with NICC.	<b>Post-Secondary:</b> WD courses serve as a solid foundation for future work in Drafting leading to a diploma, Associate of Arts degree or a four-year Bachelor's degree in many areas of engineering.	<b>Post-Secondary:</b> WD courses serve as a solid foundation for future work in Manufacturing Technology leading to a diploma, Associate of Arts degree or a four-year Bachelor's degree.
<b>Future jobs (after post-sec. edu.):</b> Auto Mechanic Diesel Mechanic Auto Collision Technician Claims Operation Specialist Service Manager	<b>Future jobs (after post-sec. edu.):</b> Architectural Engineer Civil Engineer Structural Engineer Mechanical Engineer HVAC Technician	<b>Future jobs (after post-sec. edu.)</b> : Job Shop Machinist Tool and Die Maker Welding Technology Manufacturing Technician Manufacturing Management

One Term Grades 9, 10, 11 or 12

This class will teach students very basic maintenance tasks associated with a vehicle such as checking underhood fluid levels, greasing joints, tire care, and other tasks that will help extend the life of their vehicle. Students will also learn about researching, purchasing, and insuring a vehicle. Access to a vehicle is helpful, but not required.

#### Autos I AUT:102

Introduction to Automotive Technology NICC Concurrent Credit - 1 college credit

This class is a prerequisite for Autos II & III. Autos I introduces safety practices, an overview of systems that are a part of the Automotive Technology curriculum, and shop tools and diagnostic equipment used throughout the program. Access to a vehicle is helpful, but not required.

Autos II	Two Terms
Prerequisite: Autos I (Introduction to Automotive Technology)	Grades 11 or 12

Information and practical experiences in the basic areas of automotive repair will be covered in Autos II with emphasis on areas expected to be taught in a high school industrial arts program. Also serves as an overview of automotive systems if you desire an introduction to automotive repair. Access to a vehicle is helpful, but not required.

Autos III Prerequisite: Autos I (Introduction to Automotive Technology)

This course provides students with information and practical experience for the basic areas of automotive repair. The course will also serve as an overview of automotive systems for students who desire an introduction to automotive repair. Access to a vehicle is helpful, but not required.

#### **CAD** Exploration

Students will have the option to explore three different areas of CAD (computer aided drafting) Engineering, Architecture, and Solid Modeling. All students will learn CAD Engineering skills with advanced students learning Solid Modeling and Architecture skills. A fourth-year option would include a project-based learning component related to CAD. Students will learn how to use AutoCAD to create simple, and complex engineering drawings. Students will learn how to use AutoCAD Architecture to design simple buildings, and finally a full house of your design. Students will learn how to use AutoDesk Inventor and Fusion360 to make 3D designs that may be cut out on one or two CNC mills.

#### **Construction Trades**

Students will learn the basics of construction trades. Trades included are, but not limited to, HVAC, masonry, plumbing, and electricity. Skills for these trade areas will include hands on projects that students will build, and trouble shoot issues. Presentation, speakers, and demonstrations will be included in the course. By successfully completing this course, students will receive a masonry pre-apprenticeship certificate of completion.

#### **Drafting I**

Drafting I is designed as an introduction to drafting and design. Elements of the course include basic drafting tool use, how to design letters and numbers, making shapes using tools, drawing in 3-D, and specialty drawings. This course will provide basic understanding of drafting techniques necessary to allow students to progress to Drafting II.

#### **Drafting II**

Prerequisite: Drafting I

Drafting II is an in-depth study in drafting using mechanical hand equipment on drawing tables and computers for 3-D drawings. The following will be covered: pictorial drawing (isometric and oblique), dimensioning and notes, and drawing a house design of your choice.

One Term (May take more than once) Grades 9, 10, 11 or 12

One Term Grades 9, 10, 11 or 12

One Term Grades 9, 10, 11 or 12

Grades 9, 10, 11 or 12

One Term

Two Terms

Grades 10, 11 or 12

Two Terms Grades 11 or 12

#### **Exploring Technology**

This beginning course is designed to give students a taste of what our department has to offer. Some areas covered will include engineering and transportation over land, air, and water. Hands-on projects will include building a hovercraft, water rocket, paper airplane design, toothpick towers, and others.

#### Introduction to MIG Welding

This course is designed to give students a basic understanding of metalworking and welding with a MIG welder. Students will be asked to learn basic shop skills, cutting metal with a plasma cutter, welding joints in position with a MIG welder, as well as learning basic concepts of constructing parts from a print assigned. Students will also learn what is expected of them in the industries if they decided to pursue a career in welding/metalworking. This class is one of the first classes in the strand to becoming a skilled welder.

Introduction to Stick Welding	One Term
	Grades 9, 10, 11 or 12

This course is designed to give students a basic understanding of metalworking and welding with a stick welder. Students will be asked to learn basic shop skills, cutting material with a plasma cutter, and welding different joints together with a stick welder. Students will also learn what is expected of them in the industries if they decided to pursue a career in welding/metalworking. This class is one of the first classes in the strand to becoming a skilled welder.

Welding Fundamentals WEL:330
NICC Concurrent Credit – 1 college credit
Prerequisite: Introduction to MIG Welding and Industrial Welding/Weld Safety

Students will have the opportunity to use oxyacetylene and SMAW equipment to make different types of welds required to make repairs and fabricate items. Various techniques of welding, brazing, and soldering will be experienced. Students will also learn GTAW process to help them improve their welding skills.

By completing Introduction to MIG Welding, Industrial Welding/Weld Safety and Welding Fundamentals with a passing grade, students will be able to receive a Career Pathway Certificate from NICC in Basic Welding.

Industrial	Welding	WEL:110	and	WEL:228
maustin	** Cluing	*******	ana	

NICC Concurrent Credit – 3 college credits Pre- or Co-requisite: Introduction to MIG Welding

This course combines two NICC concurrent credit courses (WEL:110 and WEL:228) and students will receive a grade for each. WEL:110 Welding Blueprint Reading – 2 college credits WEL:228 Introduction to Welding, Safety & Health – 1 college credit

Welding Blueprint Reading introduces students to the concepts and practice of blueprint interpretations as needed by welders in an industrial setting. Emphasis is on the basics of interpretation and applications in specific situations.

Safety and safe practices in the welding lab will be enforced and students will receive their OSHA 10 card when they have completed their online instruction.

\*\*\*5 hours additional before or after school time.

By completing Industrial Welding and Basic Gas Metal Arc Welding you will receive the Career Pathway Certificate: Welding – GMAW through NICC.

One Term Grades 9, 10, 11 or 12

One Term Grades 9, 10, 11 or 12

skilled welder.

One Term Grades 10, 11 or 12

One Term

Grades 9, 10, 11 or 12

Pre- or Co-requisite: Industrial Welding/Weld Safety

Basic Gas Metal Arc Welding (GMAW) is an introductory class studying Short Circuit Gas Metal Arc Welding and other related processes. Topics such as process variation, welding in various positions, principle of operation, shielding gasses, and wires will be studied. Safety and practical application of these welding processes will be stressed.

The lab provides safe practice in GMAW procedures to meet skill requirements for AWS qualifications. Job sheets are used to guide learning activities and to provide orderly and productive learning experience.

By completing Industrial Welding and Basic Gas Metal Arc Welding you will receive the Career Pathway Certificate: Welding - GMAW through NICC.

#### Shielded Metal Arc Welding and Flame and Plasma Cutting WEL:427 and WEL:434 Two Terms

NICC Concurrent Credit - 4.5 college credits Pre- or Co-requisite: Industrial Welding/Weld Safety

This course combines two NICC concurrent credit courses (WEL:427 and WEL:434) and students will receive a grade for each.

WEL:427 Shielded Basic Arc Welding (SMAW) - 3 college credits WEL:434 Flame/Plasma Cutting Fundamentals - 1.5 college credits

This is an intermediate course that is designed to give students an idea of what is expected of them as a professional stick welder. Topics will cover proper heat, polarities, and students will be weld tested and qualified on D 1.1 AWS. Tests will be given in position 1G and 2G with 7018 or 6010 rods. Students will also be required to setup and operate different processes in cutting applications.

#### **Basic Carpentry** One Term

A residential-based carpentry program where students receive hands-on training in the proper use and maintenance of typical construction hand and power tools. Students will focus on building small structures as sheds to apply what they learn in class.

#### **Cabinet Making**

Prerequisite: Basic Carpentry

Students will learn techniques like those found in the production of kitchen and bathroom cabinets. These techniques can be used to make items such as entertainment centers, vanities and more.

Woodworking	One Term
Prerequisite: Basic Carpentry	Grades 9, 10, 11 or 12

Students will be tasked with designing and building a project with a door or drawer. While the projects need not be large, they will teach basic furniture making techniques. Students may have the option of building a project for a teacher as well.

#### Wood Production

Prerequisite: Woodworking or Cabinet Making

Students will mass produce a product to sell to family/friends or will produce a large project for a customer. Students will not be required to pay for materials for these projects.

#### ART

**3-Dimensional Multimedia Art** 

3-Dimensional Multimedia Art is the study of art through height, width, and depth. This also includes form versus function. Students will learn about sculpture in the round, relief sculpture (both high and low) and statues. A multitude of media will be incorporated including drawing and painting medium. Students will be working together on larger scale group projects as well

Two Terms Grades 10, 11 or 12

One Term Grades 9, 10, 11 or 12

One Term Grades 9, 10, 11 or 12

Grades 9, 10, 11 or 12

Grades 9, 10, 11 or 12

One Term

Grades 10, 11 or 12

and individual assignments. Many project outcomes will be abstract but incorporate representational content. Students will be given written assignments and exams. This is NOT a ceramics class and clay will not be covered in this course.

**Ceramics I** 

Offered in alternating years: 2025-2026 and 2027-2028 school year

This course will offer a combination of the best of both ceramics and sculpture processes. The student will learn about clay as a material used for both potting and construction in a sculptural sense. It will include hand-building techniques, use of the potter's wheel and clay as a sculptural medium, creating busts and nonobjective abstract pieces. The student may also have the opportunity to explore other aspects of sculpture – creating pieces using tyrofoam, wood, and mixed media.

**Ceramics II** 

Offered in alternating years: 2025-2026 and 2027-2028 school year Prerequisite: Ceramics I

Using learned skills from Ceramics I, Ceramics II will allow students to expand their 3-D skills further. Students will be required to construct hand-built projects as well as working on the potter's wheel. Students may have the opportunity of incorporating other medium into their work. Students will be given written assignments and exams.

#### Drawing I

Drawing I is the foundation upon which all art forms depend. Emphasis is placed on contour line, the use of perspective, shading, and a variety of rendering techniques. Assignments will include working with a variety of drawing mediums, papers, and approaches. Students can expect to study still life, landscape, life drawing, and architecture for regular supplemental assignments. A sketch book is required.

Drawing II	One Term
Prerequisite: Drawing I	Grades 9, 10, 11 or 12

Drawing II will expand on learned skills from Drawing I and elaborate on individuality of student's interests. Students will study different artists' styles and movements in history. Students will work toward putting together a portfolio of their work from Drawing I and Drawing II. Written exams and other outside work will be required. A sketch diary is required.

#### Foundations in Art I

Foundations in Art I is designed as an introductory level course in art. All art classes offered in the current school year may be covered. In addition, the course provides foundational instruction in design, processes, art history, art appreciation, and exposure to a variety of media applications.

#### Foundations in Art II

Prerequisite: Foundations in Art I

Foundations in Art II is designed to expand upon the Foundations in Art I class. Students will be introduced to a deeper concentration of artist enrichment towards greater knowledge of the concepts in art through hands on application of media, the study of fundamentals of design, critique and evaluation of art, and discussions in art theory. All art classes currently offered may be covered except photography, computer graphics, and ceramics.

#### **Painting I**

Suggested Prerequisite: Drawing I

Painting I will introduce students to a variety of painterly processes in watercolor, tempera, and acrylic. Students will experience the mediums through basic techniques of application and expand to more sophisticated handling. Processes covered will include; water blending and mixing, wet on wet, wet on dry, glazing, and more. Students will possibly work from stilllife, landscape, and architectural subject matters. Students should be prepared to draw, take notes, and analyze professional and student artwork. Written exams will be required.

Grades 9, 10, 11 or 12

One Term Grades 9, 10, 11 or 12

One Term Grades 9, 10, 11 or 12

Grades 9, 10, 11 or 12

One Term

Grades 9, 10, 11 or 12

One Term

One Term

One Term Grades 9, 10, 11 or 12 **Painting II** Prerequisite: Painting I

Painting II will provide students with a more in-depth opportunity to explore painting mediums; watercolor, egg tempera, acrylic, and oil will be considered. They will explore blending and mixing colors, working from limited palate, and adding texture to the painting surface. Students will be painting on a variety of surfaces, including building their own stretched canvas. Students will be critiquing artwork both orally and in writing. Students can expect written exams, as well as other outside work.

#### Photoshop

Prerequisite: Foundations in Art I

Covers basic design concepts and color principles for visual communication. Conceptual and analytical thinking skills are applied through a series of design projects and discussions. Presents introductory principles of typographic composition, structure, and the basics of design. Explores visual elements to communicate ideas. The programs explored include the current versions of Adobe Illustrator and Photoshop. Students will be using the MAC computer system. Students may use their own device during certain units.

#### Art Appreciation ART:101

NICC Concurrent Credit – 3 college credits

This visual literacy class explores art through the ages from Medieval Art to Present Modern Expressionism. Students will learn how to critically evaluate artwork in both a written and oral manner while building a sound understanding of their own aesthetic properties. Students must define vocabulary words to be used towards group discussions and active participation in activities using learned knowledge is a must. Field trip required.

#### Photography

Offered in alternating years: 2024-2025 and 2026-2027 school year

In this class students learn basic knowledge and operations on a SLR manual film camera. Students will wind and develop their own black/white film. They will create photo prints in the dark room and put together an Artist's portfolio. The class will include reading, lectures, discussions, and studying credited photographic works. All learned knowledge can be applied to any film or digital camera. Creative expression is stressed throughout the course. Students may use their own device during certain units.

#### BUSINESS, FINANCE, MARKETING AND MANAGEMENT

<b>Recommended Courses for Careers in:</b>	Recommended Courses for Careers in:
Accounting, Finance, Marketing,	Information Technology, Business Specialist, A/V
Business Management & Administration	Technology & Communications
(Suggested course sequence)	(Suggested course sequence)
Global Business (9/10/11)	Multimedia (9/10)
Social Media Marketing (10/11)	Global Business (10/11))
Accounting I ACC:115 (10/11)	Social Media Marketing (10/11/12)
Accounting II (11/12)	Intro. To Entrepreneurship (11/12)
Intro. To Entrepreneurship (11/12)	Career Exploration (11/12)
Career Exploration (11/12)	
Immediate employment skills:	Immediate employment skills:
Entry-level bookkeeping with supervision,	General Office, word or data processing, receptionist,
payroll, sales, marketing, retail sales, and	sales, marketing, and retail sales
receptionist	
Post-secondary:	Post-secondary:
Community college: WD courses serve as a	Community college: WD courses serve as a solid foundation
solid foundation for future coursework in accounting,	for future coursework in information management and
finance, marketing, or management leading to an Associate of	technology leading to an Associate of Arts degree.
Arts degree.	
Four-year college:	Four-year college:
WD courses serve as a solid foundation for future coursework	WD courses serve as a solid foundation for future coursework
leading to a bachelor's degree in accounting, finance,	leading to a bachelor's degree in computer applications or
marketing, and business management & administration.	information management, or information technology.

One Term Grades 9, 10, 11 or 12

One Term (May take more than once) Grades 9, 10, 11 or 12

One Term Grades 11 or 12

One Term Grades 11 or 12

#### **Financial Literacy**

Students will examine savings, understanding investments, wealth building and college planning, credit and debt, consumer awareness of the power of marketing on buying decisions, financial responsibility and money management, insurance, risk management, income, and career decisions, different types of insurance coverage and buying, selling, and renting advantages and disadvantages relating to real estate.

#### **Global Business**

We live and work in a global economy. Business has become globalized; economies and markets around the world are interconnected and more interdependent than ever before. Learn how to think about business in a global context; understand why and how nations do business with each other. Select a country and a company to study and learn how they interact in the world economy. Topics in this project-based course focus on basic business and economic concepts, economic systems, business structures, cultural awareness, communication skills, international trade, and engaging with learners from other countries and cultures.

#### **Introduction to Entrepreneurship**

Research, plan, launch, and pitch your new business venture utilizing an interactive Virtual Business-Entrepreneurship simulation. Choose from 10 different business models to create your own unique business from the ground up. Write your business plan utilizing SCORE® and SBA® materials, establish a budget, set prices and inventory levels, create promotions using social media, hire, schedule, and manage staff, and analyze financial statements to make profitable business decisions. This class introduces real-world concepts in business finance, marketing, management, risk management, and entrepreneurship. See if you have what it takes to become a successful entrepreneur.

#### **Social Media Marketing**

Key marketing concepts and foundational theory in marketing and advertising, analytics and audits, campaign planning, and personal branding are covered. By practice and application through social media, students take on the role of social media marketing manager for an e-commerce business getting real-world hands-on experience in Mimic, a web-based social media marketing simulation. Students will write targeted social media ads, perform demographic targeting, learn social media marketing content promotion strategies, measure key performance indicators, practice ad budgeting, and perform proper content scheduling. A Social Media Marketing Certification is earned upon completion.

Multimedia	One Term
	Grades 9, 10, 11 or 12

Multimedia is content created using a combination of other content forms such as text, audio, still images, animations, and video. Design, develop, create, and test your own self-generated digital learning. Technology has changed our relationships with information and given us access to multimedia resources that were inconceivable just a few years ago. Creativity, originality, and systemic thinking are necessities for success in today's global work setting. Topics covered in this course include: Microsoft PowerPoint presentations & Movie Maker, screencasts, podcasts, promotional print media, Prezi, various Web 2.0 applications, and creating your own career portfolio website.

Accounting I ACC:115 Introduction to Accounting Grades 10, 11 or 12 NICC Concurrent Credit – 4 college credits Required: ACT Math score of 16, ALEKS placement score of 14 or Cumulative GPA 2.0 or higher per NICC

Accounting I is the language of business and is an essential part of all business activities. Accounting I prepares you to be an educated business professional and informed consumer, regardless of your chosen career path. Accounting I provides a realworld, comprehensive understanding of Generally Accepted Accounting Principles (GAAP) to make informed financial decisions. Whether you start your own service business, work in a corporation or in the financial field, understanding the accounting cycle is a must.

One Term Grades 9, 10, 11 or 12

One Term Grades 11 or 12

One Term

Grades 10, 11 or 12

Two Terms

One Term Grades 11 or 12 In this hands-on course you'll learn to analyze, journalize and post transactions, determine net income or loss, prepare financial statements, reconcile a bank statement, prepare a payroll, calculate payroll and quarterly taxes, calculate depressions, and more! Microsoft Office, Automated Accounting Software, and real-world business simulation(s) will be used throughout the course.

#### Accounting II

Prerequisite: Accounting I ACC:115

Accounting II expands on what the numbers tell you and how to make managerial decisions based on those projections. Learn to analyze financial records. How do I estimate next year's profit or a 3-year sales forecast? Students planning to major in any area of finance or business or who are considering managing or owning a business should seriously consider Accounting II. A strong working knowledge of spreadsheets is vital to successful accounting employment. This knowledge also provides a sound basis for additional work at the post-secondary level in this area.

#### **Employability Skills WBL:110**

NICC Concurrent Credit - 2 college credits

This course is designed to assist students in illustrating the skills necessary to obtain employment by aligning career goals with education plans and practice the skills and attitudes required for job success. Students will complete an inventory, practice resume writing, interviewing techniques, and work-place problem solving strategies. Networking with local employers and learning about local employment opportunities will be a key course component.

#### **COMPUTER SCIENCE**

#### **Principles of Computer Science**

This course provides content and resources that can be used to support the understanding of Iowa's computer science standards. The goal of this course is to provide students the knowledge and skills to meaningfully participate in our increasingly digital society, economy, and culture. The topics included in this course are binary numbers, data compression, legal and ethical concerns, the Internet, program function and purpose, program design and development, debugging, Boolean expressions, variables, conditionals, functions, data abstraction, strings, iterations, and lists. This course is developed by the Iowa Department of Education.

CyberSecurity

Pre- or Co-requisite: Principles of Computer Science

This semester-long introductory course is designed to provide fundamental knowledge in the field of cybersecurity. The course begins with defining cybersecurity and its importance at the individual, corporate, government, and international levels. Next, the course discusses the CIA triad and gives a basic introduction to computer hardware, which are knowledge units needed for the rest of the course. After providing this foundational introduction to the field, the course explores how cybersecurity is integrated into the fabric of human life by examining its impact on nations, laws, economics, and personal data. The course then becomes more technical in nature, introducing students to the principles of software design, physical security controls, cryptography, authentication and identity management, software vulnerabilities, the OSI model, network standards and protocols, the Internet, and hardware and software integration. The course ends by teaching security testing and assessment, securing cyber physical systems, and design trade-offs.

#### Game Development

<b>.</b>			
Pre- or Co-requisite:	Principles of	f Computer Science	

A practical course for students that provides the foundation they need to design code and develop game applications. Applications apply to mobile (IOS & Android devices), platforms (windows, MAC), consoles (PlayStation, X-box), along with VR and AR devices. Coding is based on C# and the Unity platform. Throughout the course students will create 5 distinct prototypes of gaming applications, as well as their own personal game project.

Two Terms Grades 11 or 12

One Term Grades 10, 11 or 12

Two Terms Grades 9, 10, 11 or 12

Two Terms Grades 9, 10, 11 or 12

One Term Grades 9, 10, 11 or 12

#### Introduction to Programming Language I (Python)

Expand core computer science skills. Analyze, manipulate, and develop programs using Python, a line coding language. Learn programming concepts like comments, methods, and print functions. Unplugged and Digital Citizenship lessons explore realworld applications of the Python language through data manipulation, ethical behavior, and STEM careers. At the end of this course, students will be familiar with Python and its real-world application in computer science today.

#### **Introduction to Programming II (Python)**

Prerequisite: Introduction to Programming Language I (Python) or Principles of Computer Science

Skills in this course will build off the skills they learned in Introduction to Programming Language I (Python). The language will build off the students' previous knowledge of Python coding.

#### **DRIVER EDUCATION**

#### **Driver Education**

.5 credit Class Fee: \$ To Be Determined A non-refundable deposit of \$50.00 is required

The purpose of the Driver Education course is to teach the fundamentals of safe driving through classroom and behind-thewheel experiences. To enroll in the course, a student must have a valid instruction permit, have completed 8th grade, and be 14 years old.

A student must satisfactorily complete 6 hours of behind-the-wheel instruction and 30 hours of classroom instruction to receive a completion certificate for the course.

A separate registration for the Driver Education course will be held during the second semester.

#### **EMPLOYABILITY SKILLS**

#### **Employability Skills WBL:110**

NICC Concurrent Credit - 2 college credits

This course is designed to assist students in illustrating the skills necessary to obtain employment by aligning career goals with education plans and practice the skills and attitudes required for job success. Students will complete an inventory, practice resume writing, interviewing techniques, and work-place problem solving strategies. Networking with local employers and learning about local employment opportunities will be a key course component.

One Term Grades 9, 10, 11 or 12

Summer Program

One Term

Grades 10, 11 or 12

One Term Grades 9, 10, 11 or 12

#### **ENGLISH LANGUAGE ARTS**

Each student must complete eight terms of English Language Arts before permitting to graduate from West Delaware High School. Students planning to go to a two or four-year college should take additional classes.

Students are expected to fulfill the 9-12 requirements by successfully completing:

- 1. English I or Advanced English I
- 2. English II or Advanced English II
- 3. English III or Advanced English III
- 4. Two elective English credits

#### **Recommended classes per post-graduation options:**

HS Diploma	Two-Year College	Four-Year College
English I	English I	English I or Advanced English I
English II	English II	English II or Advanced English II
English III	English III	English III or Advanced English III
Two Electives	Two Electives	Two Electives
Highly Recommended Electives	Highly Recommended Electives	Highly Recommended Electives
Contemporary Literature	Contemporary Literature	Advanced Writing
Practical Writing and Career	Creative Writing	Composition I (College Credit)
Exploration	Journalism	Intro. To Literature (College Credit)
Public Speaking	Practical Writing and Career	Journalism
	Exploration	Public Speaking
Public Speaking		
	Film and Literature	
Other Options	Other Options	Other Options
Creative Writing	Advanced Writing	Creative Writing
Journalism	Composition I (College Credit)	Practical Writing and Career
	Intro. To Literature (College Credit)	Exploration
	Journalism	Film and Literature

#### Core English Classes:

**English I** RAI and NCAA approved course

Two Terms Grades 9, 10, 11 or 12

Two Terms

Two Terms

Two Terms

English I is designed to improve reading comprehension and writing skills. Students will read a variety of fiction and nonfiction. Other skills include vocabulary development, research, and process writing.

#### Advanced English I

Advanced English I is designed to challenge students to critically analyze short stories, novels, an epic, and nonfiction selections through class discussion and essay writing. Other skills include vocabulary development, research, communication, and process writing. Note: Students will move through texts at an advanced pace and need to be self-motivated.

#### English II

Prerequisite: English I or Advanced English I RAI and NCAA approved course

English II is designed to improve reading comprehension and analysis, writing, communication, and research skills. Students will read various fiction and nonfiction selections, deliver a formal presentation, and use the writing process to improve their writing skills. Specifically, students will write journals, an argumentative essay, and a research paper while focusing on grammar, usage, and mechanics.

#### **Advanced English II**

Prerequisite: English I or Advanced English I RAI and NCAA approved course

Advanced English II is designed to challenge students to think critically and improve discussion and writing skills. Students will be expected to move through readings at an advanced pace and be expected to read and write extensively outside of class. Throughout the course, students will read various fiction and nonfiction selections, deliver a formal presentation, and use the

writing process to improve their writing skills. Specifically, students will write journals, an argumentative essay, and a research paper while focusing on grammar, usage, and mechanics.

#### English III

Prerequisite: English II or Advanced English II RAI and NCAA approved course

English III is designed to challenge students to critically analyze classic American Literature pieces from Native American traditions to modern times through discussions, research, presentations, and various writings. Other skills include vocabulary development, grammar, speaking, listening, and the writing process.

#### Advanced English III

Prerequisite: English II or Advanced English II RAI and NCAA approved course

Advanced English III is designed as a project-based, challenging course that prompts students to critically analyze classic American Literature pieces. Works are drawn from Native American traditions to modern times and synthesized through discussions, research, presentations, and various writing opportunities. Other skills include vocabulary development, grammar, speaking, listening, and the writing process. Students will apply their findings from these classical texts to the world around them.

#### **Elective English Classes:**

#### **Contemporary Literature** RAI approved course

This elective course introduces students to contemporary fiction and non-fiction and encourages students to think critically in various formats, including discussion, projects, writing, and presentations. This course will provide a balance in student and teacher selected reading materials that represent popular issues and ideas.

Practical Writing and Career Exploration	One Term
° ·	Grades 9, 10, 11 or 12

Practical Writing and Career Exploration will allow students to improve their writing and communication skills through a variety of business-world documents (such as e-mails, brochures, letters, proposals, etc.) and presentations. Students will also research possible careers, write resumes and cover letters, and practice interview skills.

Public Speaking

RAI and NCAA approved course

Public Speaking exposes students to a variety of communication experiences. Skills covered will include rhetorical devices, listening skills, vocal delivery, writing for a specific audience, and researching. No matter what a student's previous speaking experiences have been, this class will help alleviate the stress of presentations.

#### **Creative Writing**

Prerequisite: English II or Advanced English II RAI and NCAA approved course

In Creative Writing, students will use the writing process to develop original pieces of fictional and nonfiction prose. After taking two pieces through the writing process, students will participate in an in-class writing workshop where they will evaluate the writing of peers and also have the opportunity to receive feedback on the piece they submit. Creative Writing is for students who enjoy writing and are willing to hone their craft through daily practice and the use of the writing process.

#### Journalism

RAI approved course

Journalism offers students the opportunity to produce the school yearbook and newspaper. Along with formal instructions, students will participate in a workshop approach in writing headlines, captions, and articles as well as developing their skills in design, desktop publishing, photography, etc. The ability to meet deadlines and the discipline to revise one's work are essential for success in this class.

Two Terms Grades 10, 11 or 12

Two Terms Grades 10, 11 or 12

Grades 9, 10, 11 or 12

One Term

One Term Grades 9, 10, 11 or 12

One Term Grades 10, 11 or 12

Two Terms (May take more than once) Grades 10. 11 or 12 Advanced Writing Prerequisite: English III or Advanced English III RAI and NCAA approved course

Advanced Writing uses a workshop format to prepare students for two- and four-year college writing tasks. This class helps students gain confidence and proficiency through daily application of journaling, language arts skills, and practice in revision and proofing skills. Some literature study will be included as examples and for analysis. Students will maintain a portfolio of their work, juggle multi-task assignments, and practice time management.

#### Film and Literature

RAI approved course

A high level of reading texts, film journal articles and film reviews will occur. Students will be required to be active participants in film viewings, discussion, and writings which will include their own reviews of films, analysis of the dramatic, cinematic, narrative aspects of films, and comparisons of literary works and their cinematic adaptations. This course will also implement technology, research of history, the use of Socratic seminars after film viewing, and student presentations. Students will become more knowledgeable and appreciative readers and more perceptive viewers of film through learning basic cinematic techniques that define different genres of film.

#### **Composition I ENG:105**

NICC Concurrent Credit – 3 college credits Required: ACT English score of 18, Accuplacer writing score of 5 or Cumulative GPA 2.8 or higher per NICC Highly Recommended: English III RAI and NCAA approved course

A writing course that prepares the student for the types of communication and thought essential to academic and workingworld success. The course focuses on writing as a process and is intended to help students identify and refine their own personal writing.

#### **Introduction to Literature LIT:101**

NICC Concurrent Credit – 3 college credits Prerequisite: Composition I with a minimum grade of C- or an equivalent composition course at another college or university with a minimum grade of C- per NICC RAI and NCAA approved course

This class uses college level literature to focus on the craft of short fiction, poetry, and drama. Students will work to improve their analytical skills of both established and recent literary texts through class discussions, journaling, and essay writing.

#### **Class Enrollment by Assignment Only**

#### Language Arts Lab (Classroom enrollment by assignment only) Students will receive general elective credit

Language Arts Lab is designed to improve reading comprehension and fluency. Students will participate in independent reading, choral reading, vocabulary study, and reading strategy practice throughout the semester. Students are assigned to this class based on assessment scores.

#### FINANCIAL LITERACY

#### **Financial Literacy**

Students will examine savings, understanding investments, wealth building and college planning, credit and debt, consumer awareness of the power of marketing on buying decisions, financial responsibility and money management, insurance, risk management, income, and career decisions, different types of insurance coverage and buying, selling, and renting advantages and disadvantages relating to real estate.

One Term Grades 11 or 12

One Term

One Term Grades 11 or 12

Two Terms Grades 9, 10 or 11

One Term

Grades 11 or 12

One Term Grades 11 or 12

#### HEALTH

#### Health I

The primary aim of the health education course is to help students make knowledgeable decisions regarding health issues that will affect their present and future wellness.

The course will focus on the areas of Nutrition: food choices, food evaluation, dietary guidelines, and menu development; Environmental Health: physical and social, goal setting, and decision making; Substance Abuse: alcohol, tobacco, and other illegal drugs; and Reproductive Health and Decision Making. Other current health topics will be covered as time permits.

#### Health II

Prerequisite: Health I

This course is designed to provide students with greater in-depth knowledge about health issues. The major content areas from Health I will be expanded on. Nutrition: menu planning, diet analysis, fitness plan development, and implementation; Health Careers and Community Health Resources; Safety and First Aide; Reproductive Health and Pregnancy Prevention.

#### HUMAN SERVICES

#### Registered Apprenticeship opportunities are available in Meat Cutting through application. See instructor for details.

Students will learn to make wise food choices and plan nutritious and appealing menus according to the latest dietary guidelines. Students will learn basic culinary skills including: kitchen safety and sanitation, equipment and utensils, standard measurements and equivalents. Topics covered include: fruits, vegetables, grain products, quick breads, soups, salads, and dairy products.

#### Foods II

Prerequisite: Foods I

Students will explore the organization and procedures of a commercial kitchen and participate in the roles of a traditional kitchen brigade such as sous chef, pastry chef, and garde manger chef. Groups will learn about menu development and ultimately create a restaurant experience for select patrons that will demonstrate the culinary skills learned in the class. Those skills would focus on meat cookery such as beef, pork, chicken, and fish, and preparing pastries. Pastry topics would include yeast breads, cakes, pies, candies, and more. By successfully completing this course, students will receive a meat cutting pre-apprenticeship certificate of completion.

#### **Housing Fundamentals**

Students who are considering careers in interior design, real estate, the housing construction industry or just want to gain personal knowledge on housing decisions, will benefit the most from this course. Included are the following areas of study: human needs and housing, housing and society, choosing a geographic location, comparing and contrasting types of dwellings, rental properties, home buying, exterior and interior construction, evaluating and drawing floor plans and using the elements and principles of design to furnish and decorate a home. Field trips to area homes and related businesses are included.

#### Human Growth and Development

Topics include: Decision making skills, conception, abstinence/birth control, stages of prenatal development, complications during pregnancy, and the importance of proper nutrition and exercise during pregnancy. Footage of different child birthing methods is viewed along with understanding the different types of birthing facilities and health professional options. Development milestones from birth to one-year-old are explored.

Grades 9, 10, 11 or 12

One Term

One Term

One Term Grades 9, 10, 11 or 12

One Term Grades 10, 11 or 12

One Term

Grades 9, 10, 11 or 12

es, and menu develo

One Term

Grades 9, 10, 11 or 12

Grades 9, 10, 11 or 12

Foods I

This class will give you skills you need to be an effective parent, teacher, social worker, or any other career dealing with children. Topics include functions of the family, family structures, families in society, trends affecting our families, the importance of each parent's role in the child's life, how to encourage appropriate behavior and effectively deal with misbehavior. Students participate in the popular "Baby Think It Over" infant simulation.

#### **Introduction to Nutrition**

Students who want to know more about eating healthy or are interested in careers in the health care fields such as dietetics, nutrition, nursing and/or sports nutrition would best benefit from this course. Students will gain a practical knowledge of good nutrition and an introduction to diet therapy. Course includes units on the digestive system as well as each of the nutrient groups: carbohydrates, fats, protein, vitamins, minerals, and water. Nutrition in the life cycle: identifying the nutritional needs and recommendations during pregnancy, lactation, childhood and adult stages, along with diets for various medical conditions are also dealt with in this course.

#### Food Management Internship/Co-op

Students will obtain a job in the food industry in Manchester or the surrounding area to gain skills in the culinary field. They receive credit while possibly earning an income.

Students who successfully complete 6 courses in Foods and Nutrition will graduate with skills that allow them to enter the field of food production, service, management or related health occupations with training beyond the average high school graduate. This program of study directly leads to programs at the community college and some four-year programs.

\*This class requires students to travel off school grounds to the assigned worksite and meeting locations. Students are responsible for their own transportation. Parental approval is required. If transportation is a barrier for this class, please contact the instructor.

#### MATHEMATICS

Every West Delaware Graduate is required to complete one course from each of the following levels:

Integrated Math I or Algebra I Integrated Math II or Geometry Integrated Math III or Algebra II Statistical Analysis or Statistics

High School Diploma and Two-Year College	Four-Year College
Integrated Math I	Algebra I
Integrated Math II	Geometry
Integrated Math III	Algebra II
Statistical Analysis	Statistical Analysis or Statistics (NICC)
<b>Recommended Electives:</b>	<b>Recommended Electives:</b>
Pre-Calculus Functions	Pre-Calculus (NICC)
	Calculus I (NICC)
	Pre-Calculus Functions

To be best prepared for a 4-year college, the above 4-year college pathway is recommended.

#### Integrated Math I

RAI and NCAA approved course

This course emphasizes proficiency in skills involving numbers and operations, algebra and geometry. This course is the first course in a 3-course sequence.

One Term (May take more than once) One credit per term Grade 12

One Term Grades 10, 11 or 12

Two Terms Grades 9, 10, 11 or 12

One Term Grades 9, 10, 11 or 12 This course will include solving equations, inequalities, systems of equations and inequalities, graphing linear functions, polynomials operations, and factoring quadratic equations.

#### **Integrated Math II**

Prerequisite: Integrated Math I or Algebra I RAI and NCAA approved course

This course emphasizes proficiency in skills involving numbers and operations, algebra and geometry. This course is the second course in a 3-course sequence. This course will include the study of review topics from Integrated Math I.

#### Geometry

Prerequisite: Algebra I RAI and NCAA approved course

Geometry deals chiefly with plane figures, although the basic elements of Solid Geometry and Coordinate Geometry are included. Logical proof is used to justify familiar geometric formulas and relationships, and to develop new ones.

#### **Integrated Math III**

Prerequisite: Integrated Math II or Geometry RAI and NCAA approved course

This course emphasizes proficiency in skills involving numbers and operations, algebra and geometry. This course is the third course in a 3-course sequence. This course will include the study of review topics from Integrated Math I and Integrated Math II.

Algebra II Prerequisite: Geometry

RAI and NCAA approved course

This course will include the study of the following functions: quadratic, polynomial, radical, rational, and trigonometric.

#### **Pre-Calculus Functions**

Prerequisite: Integrated Math III or Algebra II RAI and NCAA approved course

This course is for students seeking additional higher-level math. The class will study various functions including: polynomial, trigonometric, exponential, and logarithmic. This course is intended for students who do not qualify or do not want to take college Pre-Calculus MAT:128 through NICC.

#### **Statistical Analysis** Prerequisite: Integrated Math III or Algebra II RAI and NCAA approved course

The purpose of this course is an introduction to the basic methods of statistical reasoning. The course will help the student develop the ability to summarize data, interpret data and draw conclusions based on the data. This course is intended for students who do not qualify or do not want to take college Statistics MAT:156 through NICC.

**Statistics MAT:156** NICC Concurrent Credit - 3 college credits Grades 10, 11 or 12 Prerequisite: Algebra II Required: ACT Math score of 20, ALEKS placement score of 35 or Cumulative GPA 2.8 or higher per NICC RAI and NCAA approved course

The purpose of this course is an introduction to the basic methods of statistical reasoning. The course will help the student develop the ability to summarize data, interpret data and draw conclusions based on the data.

Two Terms Grades 9, 10, 11 or 12

Two Terms Grades 10, 11 or 12

Grades 9, 10, 11 or 12

Two Terms

Two Terms Grades 10, 11 or 12

Two Terms

**Pre-Calculus I MAT:128** Two Terms NICC Concurrent Credit - 4 college credits Prerequisite: Algebra II Required: ACT Math score of 22, ALEKS placement score of 55 or Cumulative GPA 2.8 or higher and Algebra I & II with C- or above per NICC RAI and NCAA approved course

Prepares you for Calculus. Studies the nature of elementary functions and their role in mathematics by integrating a combination of algebra and trigonometry. Topics include the real number system, functions, polynomials and rational functions, exponential and logarithmic functions, trigonometric functions, trigonometric identities, analytic trigonometry, systems of equations, and matrices.

#### Calculus I MAT:210

NICC Concurrent Credit - 4 college credits Grades 10, 11 or 12 Prerequisite: Pre-Calculus I MAT:128 Required: ACT Math score of 26, ALEKS placement score of 75 or Cumulative GPA 2.8 or higher and Pre-Calculus I with Cor above per NICC RAI and NCAA approved course

Gain an understanding of calculus and analytical geometry, differentiation, and applications of the analytic geometry, and differentiation.

#### MUSIC

Mixed Chorus, Concert Choir, Bass Clef Choir, and Treble Clef Choir are all year long skinny classes. Students may choose up to two classes. Instrumental Music, Bass Clef Choir, and Treble Clef Choir meet at the same time.

#### **Instrumental Music**

Regularly scheduled lessons on an individual or small group basis is required. During 1st Term, "Pride" Marching Band performs at home football games (varsity football team members are exempted from marching at home games), some civic parades, and several marching band competitions. Instrumental Music rehearsals begin in 2<sup>nd</sup> Term and continue throughout the remainder of the school year. Rehearsal emphasis is based on development of symphonic band sound through work on intonation, musical expression, listening, and sight-reading. Members of the band are exposed to all types and styles of band literature. Instrumental Music performs 3-4 formal concerts per year, in which attendance is required. In addition, members of the group have the opportunity to audition for the All-State Music Festival, various honor bands, and State Solo and Ensemble Festival.

School horn rental/uniform cleaning and replacement fees to be established on an annual basis.

#### **Mixed Chorus**

Open primarily to any freshman or sophomore. Class emphasis is on correct vocal development and part independence as well as music reading. Literature is taken from all styles and time periods. Individual lessons are a requirement for this class. Two concerts are required each semester as well as State Large Group Festival. Students have the opportunity to participate in the All-State Music Festival, State Solo-Ensemble Festival and various honor choirs.

Uniform cleaning and replacement fee to be established on an annual basis. There is only one fee for the music department.

#### **Bass Clef Choir**

Pre- or Co-requisite: Mixed Chorus or Concert Choir

Class emphasis is on the vocal characteristics unique to the lower registry and developing the entire range. Skills are refined and developed from Mixed or Concert Choir. One concert is required each term as well as State Large Group Festival.

Uniform cleaning and replacement fee to be established on an annual basis. There is only one fee for the music department.

### Grades 10, 11 or 12

Two Terms

Up to Four Terms Grades 9, 10, 11 or 12

Four Terms Grades 9, 10, 11 or 12

Four Terms

Grades 9, 10, 11 or 12

**Treble Clef Choir** Pre- or Co-requisite: Mixed Chorus or Concert Choir

Class emphasis is on the vocal characteristics unique to the higher registry and developing the entire range. Skills are refined and developed from Mixed and Concert Choir. One concert is required each term as well as State Large Group Festival.

Uniform cleaning and replacement fee to be established on an annual basis. There is only one fee for the music department.

#### **Concert Choir**

Class emphasis is on development of the choral sound through performance. Literature is taken from the state required list and all-state repertoire as well as other sources. It will include many styles from many time periods. Individual lessons are a requirement for this class. This class is geared toward students who have one or two years of a high school choir (although this is not a prerequisite). One concert is required each term as well as State Large Group Festival, and Graduation. Students have the opportunity to participate in the All-State Music Festival, State Solo-Ensemble Festival and various honor choirs.

Uniform cleaning and replacement fee to be established on an annual basis. There is only one fee for the music department.

#### **Music Theory**

This course is open to students who are interested in learning more about the mechanics of music, how it is put together and why. This course would be very helpful to those planning on music as a vocation, as well as those wanting a more in-depth study of music. Music Theory is intended for students who want to explore the theory of music at a deeper level.

### Music AppreciationOne TermGrades 9, 10, 11 or 12

This course is a survey of the development of music through study of representative compositions of many periods and styles. Vocabulary is presented to discuss the musical works. Upon completion of the course, the students will learn to listen to music with increased understanding, think and write clearly about music, and become more knowledgeable members of an audience.

#### PHYSICAL EDUCATION

Physical Education includes physical fitness activities that increase cardiovascular endurance, muscular strength and flexibility; sports and games, tumbling and gymnastics; rhythms and dance; water safety; leisure and lifetime activities.

Physical EducationOne TermRequiredGrades 9, 10, 11 & 12

This course will include an introduction to body composition and the development of an individualized program designed to improve body composition. Students will use a SMART goal plan to establish fitness goals. The students will assess and adjust their individual needs through the use of time in the weight room and in PE activities. Students will be exposed to multiple lifelong activities. These activities will be designed to improve their understanding and technique in body weight exercise, improve basic core strength and stability, and development of leadership and teamwork qualities through game play. Students will participate in more advanced techniques in the weight room and will be exposed to a higher level of skills activity settings each year.

#### **PROJECT LEAD THE WAY**

PLTW's curriculum makes math and science relevant for students. By engaging in hands-on, real-world projects, students understand how the skills they are learning in the classroom can be applied in everyday life.

Introduction to Engineering Design (IED) EGT:400 NICC Concurrent Credit - 3 college credits Highly Recommended: Pre- or Co-requisite Integrated Math I or Algebra I

The major focus of the IED course is to expose students to the design process, research and analysis, teamwork,

nly one fee for the music Four Terms

Grades 11 or 12

One Term

Two Terms

Grades 9, 10, 11 or 12

Grades 9, 10, 11 or 12

Four Terms Grades 9, 10, 11 or 12 communication methods, global and human impacts, engineering standards and technical documentation. Students use 3D solid modeling design software to help them design solutions to solve proposed problems and learn how to document their work and communicate solutions to peers and members of the professional community. This course teaches students to:

- Understand and apply the design process to solve various problems in a team setting
- Interpret their own sketches in using computer software to design models
- Understand cost analysis, quality of control, staffing needs, packing and product marketing
- Explore career opportunities in design engineering and understand what skills and education these jobs require

#### Principles of Engineering (POE) EGT:410

NICC Concurrent Credit - 3 college credits Highly Recommended: Pre- or Co-requisite Integrated Math I or Algebra I RAI approved course

This course provides an overview of engineering and engineering technology. Students will develop problem-solving skills by tackling real-world engineering problems. Students will get practical hands-on experiences in Process Design, Communication and Documentation, Systems of Engineering, Statics, Testing of Materials, Dynamics, and Quality and Reliability of Products. This course teaches students to:

- Demonstrate an understanding of engineering concepts, theories and technological trends
- Analyze various engineering and technology career opportunities
- Demonstrate teamwork, leadership, safety practices and work ethic by engaging in individual and team activities
- Apply acquired knowledge to design and construct devices used to solve practical problems

#### SCIENCE

The Iowa Core Curriculum requires that West Delaware students complete:

- 1 term earth science (available through Science Interactions)
- 1 term physical science (available through Science Interactions)
- 2 terms of biological science (Concepts of Biology or Biology)
- 2 terms of chemistry (Concepts of Chemistry or Chemistry I)

High School Diploma and Two-Year College	Four-Year College
Science Interactions	Science Interactions
Concepts of Biology	Biology
Concepts of Chemistry	Chemistry I
Recommended Electives	Recommended electives (Four-year College)
(HS Diploma and Two-year College)	Astronomy
Astronomy	Physics
Biology	Chemistry II
Chemistry I	Chemistry III
Environmental Science	Anatomy and Physiology I
	Anatomy and Physiology II
	Environmental Science

Six terms of science are required for graduation. Six terms of laboratory science are strongly recommended by <u>most</u> and required by <u>many</u> institutions for admission to college or a university (Science Interactions, Concepts of Chemistry, or Concepts of Biology generally do not meet these requirements for a 4-year institution).

A combination of advanced courses in Biology, Chemistry, and Physics are also taken by many college-bound students, especially those wanting to prepare for a science related career. The Astronomy and Environmental Science courses are electives available to students who have successfully completed Science Interactions (or an equivalent course load and meet appropriate prerequisite).

Science Interactions	Two Terms
RAI and NCAA approved course	Grade 9

Students will use scientific inquiry to explore physical science concepts that they will apply to real-world situations in the areas of forces, energy, light and sound, and earth science.

**Environmental Science** Prerequisite: Science Interac

Prerequisite: Science Interactions RAI and NCAA approved course One Term Grades 9, 10, 11 or 12

Two Terms Grades 9, 10, 11 or 12 Students will examine the biological basis of environmental science and human influence on biosphere dynamics. Emphasis on scientific principles, inter-relationships among resources, pollution and environmental degradation, soil and water conservation, and the impact that politics, economics, ethics, and world view have on the future direction for life on the planet.

#### **Concepts of Biology**

Prerequisite: Science Interactions

Students will be studying basic biological principles in everyday life. Students will examine biological processes in living organisms using investigation and inquiry. They will examine and analyze the human body processes, related human health and environmental issues, and will construct models and use research to connect the knowledge of the hierarchical organization of living things.

#### Biology

Prerequisite: Science Interactions RAI and NCAA approved course

Students will be studying the basic biological principles of life in depth. Students will examine biological processes in living organisms using investigation and inquiry. They will examine and analyze the human body processes, related human health and environmental issues, and will construct models and use research to connect the knowledge of the hierarchical organization of living things.

#### **Concepts of Chemistry**

Prerequisite: Science Interactions

Students will use scientific inquiry to explore chemical and biochemical concepts dealing with elements, atoms, bonds, solutions, reactions, photosynthesis, and cell respiration. They will demonstrate an understanding of these concepts by hypothesizing outcomes, conducting experiments, analyzing results, drawing conclusions, and relating these concepts to the real world.

#### **Chemistry I**

Prerequisite: Science Interactions RAI and NCAA approved course

Students will apply the scientific method and communicate their findings as they inquire into the properties of elements, compounds, macromolecules and their reactions. Students will compile a body of information that relates selected chemical applications to course concepts in order to complete their inquiry.

#### Chemistry II

Prerequisite: Chemistry I, Algebra II or Integrated Math III RAI and NCAA approved course

Students will apply the scientific method and communicate their findings as they inquire into the properties of everyday fluids and the particles they contain. Students will estimate, calculate, and derive stoichiometric relationships among particles and demonstrate hypothetical interactions by explaining, illustrating, role-playing and constructing particle models.

#### Chemistry III

Prerequisite: Chemistry II RAI and NCAA approved course

Students will apply the scientific method and communicate their findings as they inquire into the properties and interactions of matter and energy. Students will derive relationships from and draw conclusions about reacting chemicals and relate their findings to the world around them.

#### Astronomy

Prerequisite: Science Interactions RAI and NCAA approved course

Investigate the history of space exploration, constellations, and use of the telescope. Study the elements of our solar system: planets and their moons, comets, asteroids, and the sun. Astronomical principles will be presented in a combination of student activities, at a low level of mathematical difficulty, and involving various laboratory inquiry experiences.

Two Terms Grades 9, 10, 11 or 12

Two Terms Grades 9, 10, 11 or 12

Grades 10, 11 or 12

Grades 10, 11 or 12

Two Terms

Two Terms

One Term Grades 11 or 12

One Term Grades 11 or 12

One Term Grades 10, 11 or 12

Physics Prerequisite: Science Interactions and Algebra II RAI and NCAA approved course

Using inquiry, students will study reaction and particle physics, kinematics, vectors, forces, momentum, projectiles, and rotary motion. This is a class that is recommended for students who need a basic physics understanding for future study but do not wish to delve into trigonometry applications (e.g., nursing, radiology tech, music, dental tech, armed forces, or educationrelated majors).

### Anatomy and Physiology (A&P I)

Prerequisite: Biology and Chemistry I RAI and NCAA approved course

Students will examine and analyze the systems of the human body and demonstrate an understanding of the structure and function of the systems as interdependent and dependent systems through illustration, media projects, and reports.

#### Anatomy and Physiology II (A&P II)

Prerequisite: Anatomy and Physiology I RAI and NCAA approved course

Students will examine and analyze the systems of the human body and demonstrate an understanding of the structure and function of the systems which are interdependent and dependent systems through the use of illustrations, media projects, and reports. They will explain the interdependence of all body systems which are not examined in the first course.

#### SOCIAL STUDIES

Global Studies	Two Terms
RAI and NCAA approved course	Grades 9, 10, 11 or 12

A variety of regions will be examined through many different disciplines such as geography, history, economics, sociology, anthropology and political science. Social issues that relate to the region will also be discussed in the course. The objectives of this course are to give students a better understanding of the regions and how they interact with our own culture.

#### **Introduction to Psychology**

RAI and NCAA approved course

This course will examine the conscious and unconscious levels of the brain. Also, during this one-term class, topics like personality development, sensation and perceptions along with approaches to psychology will be studied.

#### Introduction to Sociology

RAI and NCAA approved course

Basic sociological principles and basic processes of group behavior will be studied. This includes the study of social interaction, family and group life, social institutions, status and role, culture, population, structure and change, and community structures (both urban and rural).

#### **Modern American History**

RAI and NCAA approved course

The political, social, and cultural history of America is studied in the content of the fall of communism to present day. Students will use primary and secondary sources and will learn to use social studies skills. Several writing samples and projects are required in this course.

#### **Modern Social Problems**

RAI and NCAA approved course

During the term the following topics may be examined: inequalities of race and ethnicity in the United States, inequalities of gender and age, adolescent issues, and issues within the American family. The objective of the course is to give the student a better understanding of these social problems, analyze the nature and causes, and suggest possible strategies and solutions.

One Term Grades 11 or 12

One Term

Grades 11 or 12

Grades 9, 10, 11 or 12

One Term Grades 9, 10, 11 or 12

One Term Grades 9, 10, 11 or 12

One Term Grades 9, 10, 11 or 12

One Term

Two Terms Grades 10, 11 or 12 Focuses on human and physical characteristics of regions along with the historical content of those areas. The class will use multiple tools in order to process global issues and propose solutions in a local and global context.

#### **United States History**

RAI and NCAA approved course

United States History, WWI to the Civil Right Movement, is a course that is a continuation of 8th grade American History. This course will begin with the origins of WWI and end with the fall of communism. In this course we will study the following topics: WWI, the Jazz Age, the Great Depression and New Deals, WW II, the Cold War, the era of the 1960s and Civil Rights. The study within each of the topics will focus on the changes within American society in the following areas: social, political, ideological, economic, technology, and pop culture. Students are required to complete work using primary and secondary sources and will learn how to use social studies skills. Several writing samples and projects are also required in this course.

#### **American Government**

Required RAI and NCAA approved course

American Government is a two-term course required for graduation. This course covers the role and characteristics of the state, the three branches of government and their functions, federalism, the Constitution and basic rights, and the role that Supreme Court decisions have in society. The course emphasizes the rights and responsibilities of citizens, immigration, elections and political parties, and civil and criminal law. Emphasis will be on critical thinking and reasoning skills, as well as the analysis of current issues and their relevance to local, state and national levels.

#### **TALENTED AND GIFTED (TAG)**

**TAG Seminar** Required: Identified TAG students only

Identified TAG students can sign up to take a nine-week class with the TAG teacher. During the nine-week class, the students will brainstorm and research an area of interest. Students will be expected to complete a contract and write a proposal as to how they are going to fulfill the project requirements. Students will keep a learning log as to what is accomplished each day, and the log will be a part of the final evaluation. A rubric will be developed, between students and the TAG teacher, for grading the final project.

#### WORK BASED LEARNING

**Career Exploration** 

Only two terms per year One credit per term Grades 11 or 12 Age requirement: 16 years

Career Exploration is a school-business partnership designed to give students the opportunity to learn, work, and experience a real career in which they are interested through placement in a local business. A training plan and contract will be drawn up between the student, instructor, parent/guardian, and the work site supervisor. Students will complete class assignments, a time log, a reflection journal, a final project related to their work experience, and be evaluated at the end of each term. Students will complete a career/job survey prior to class to facilitate work site placement by the start of class. Students will not be placed at a work site owned or supervised by a family member or close relative. Students currently employed/supervised in a position not overseen by a family member may also enroll. In order to earn credit, students are required to attend school and the work site on a regular basis.

\*This class requires students to travel off school grounds to the assigned worksite and meeting locations. Students are responsible for their own transportation. Parental approval is required. If transportation is a barrier for this class, please contact the instructor.

One Term Grades 9, 10, 11 or 12

Two Terms Grade 12

One Term (May take more than once) Grades 9, 10, 11 or 12

Two Terms Grades 9, 10, 11 or 12

One Term (May take more than once) One credit per term Grades 11 or 12

Students will gain practical, work-based learning skills through community-based experiences. Students will select a job placement based on a potential future career. The job placement will build on the student's academic knowledge, higher order reasoning and problem-solving skills, work attitudes, general employability skills, and occupational-specific skills. Students will not be placed at a work site owned or supervised by a family member or close relative. For scheduling purposes, MOC will be placed in the student's schedule during fourth block. It may be paired with an Open Campus.

\*This class requires students to travel off school grounds to the assigned worksite and meeting locations. Students are responsible for their own transportation. Parental approval is required. If transportation is a barrier for this class, please contact the instructor.

#### WORLD LANGUAGE

World language study is strongly advised for those who wish to attend college and for those who are interested in business occupations, but world language classes are open to any students who have a desire to learn to communicate in another language. All students should be aware that mastery of any language takes a good deal of time and effort; therefore, an extended sequence of study is recommended.

College-bound students are advised to consider their plans carefully and to check catalogs of colleges to be sure they are fulfilling the language requirement. Many colleges require world language and often they are willing to count high school classes toward the college requirement. Two cautions: 1) "two levels of world language" means two levels of the <u>same</u> language and 2) taking two levels of high school language does not necessarily exempt a student from college language requirements. Some schools give proficiency tests or require more than two levels. Check the catalog carefully.

Students must pass the first term of a class with a grade of 60% or higher in order to continue to the next level.

College-bound students should plan to be in a language class their senior year if possible.

#### FRENCH:

French I RAI and NCAA approved course

French I is an introductory-level French class. In French I, students will learn basic French vocabulary and grammar and will be introduced to the culture of the French-speaking world. All four communications skills--listening, speaking, reading, and writing--are practiced.

**French II** Prerequisite: French I RAI and NCAA approved course

In French II, students continue study of basic French vocabulary, grammar, and culture of the French-speaking world. The primary goal is to develop the ability to communicate in French.

#### French III

Prerequisite: French II RAI and NCAA approved course

French III is an advanced course dealing with continued study of structure, vocabulary, and cultures. Speaking will be emphasized, and class activities are designed to allow for ample practice in using the language to communicate. This class is conducted entirely in French. Depending on enrollment, French III may be taught in combination with French IV-V.

**French IV** Prerequisite: French III RAI and NCAA approved course

In French IV, students will continue to expand their communicative abilities. The French IV class is conducted entirely in French.

Two Terms Grades 9, 10, 11 or 12

Two Terms Grades 9, 10, 11 or 12

Two Terms Grades 10, 11 or 12

Two Terms

Grades 10, 11 or 12

French V Prerequisite: French IV RAI and NCAA approved course

French V is an advanced class. Class goals and activities can be modified depending on the needs of the students, but in order to be successful, students need to be self-motivated and responsible. French V is currently offered as a combined class with French IV.

#### **SPANISH:**

Spanish I RAI and NCAA approved course

Spanish I covers basic vocabulary, grammar, and sentence structure necessary to using the language. Cultural information on Hispanic countries is included.

#### Spanish II

Prerequisite: Spanish I RAI and NCAA approved course

In Spanish II, students continue study of basic Spanish vocabulary, grammar, and culture of the Spanish-speaking world. The primary goal is to develop the ability to communicate in Spanish.

#### **Spanish III**

Prerequisite: Spanish II RAI and NCAA approved course

Spanish III is an advanced course, dealing with continued study of grammar, sentence structure, vocabulary, and cultures. The emphasis in Spanish III is on speaking. The class is conducted entirely in Spanish and no English is permitted. Depending on enrollment, Spanish III may be taught in combination with Spanish IV-V.

#### Spanish IV

Prerequisite: Spanish III RAI and NCAA approved course

In Spanish IV, students will continue expanding their communicative abilities. In Spanish IV the class is conducted entirely in Spanish.

#### Spanish V

Prerequisite: Spanish IV RAI and NCAA approved course

Spanish V is an advanced class. Class goals and activities can be modified depending on the needs of the students, but in order to be successful, students need to be self-motivated and responsible. Spanish V is currently offered as a combined class with Spanish IV.

#### **OTHER PROGRAMS**

#### **Tutorial Learning (Classroom enrollment by assignment only)**

This classroom will provide structured academic assistance and support. The focus will be on improved attendance, development of appropriate goals and work habits to achieve academic success. Criteria for acceptance into this course will be based on the student's past attendance record and previous grades. Grading for this course will be Pass-Fail.

#### **Open Campus**

Open Campus is a privilege for seniors who have earned passing grades in each course in the term previous. Should a student receive a failing grade, they would not be granted Open Campus. If course grades improve to all passing in the next term,

Two Terms Grades 11 or 12

Grades 9, 10, 11 or 12

Two Terms

Two Terms Grades 9, 10, 11 or 12

Grades 10, 11 or 12

Two Terms

Two Terms Grades 10, 11 or 12

Two Terms Grades 11 or 12

Only two terms per year

Grade 12

Тто Т

students will be eligible for Open Campus the following term. Parental permission for Open Campus is given during the online PowerSchool registration at the beginning of the school year. Students may not take Open Campus more than one period per term. Students enrolled in Open Campus cannot utilize a PE Waiver in the same academic year.

#### Placement in College Credit Course (PICC)

High school students may take college courses for both high school and college credit under the provisions of Senior Year Plus programming. The Placement in College Credit courses (PICC) program allows high school students to enroll part-time in college credit courses at designated community colleges prior to high school graduation, earning both high school and college credit for the courses taken. Northeast Iowa Community College (NICC), is the designated community college for PICC coursework at West Delaware. Students in grades nine through twelve who demonstrate proficiency in all areas of ISASP, may apply for enrollment in PICC courses after consultation with the building principal and at the expense of the school district. For the purposes of PICC, courses requested may not be comparable to courses offered by West Delaware School District. Comparable is not synonymous with identical, but means that the content of a course provided to a high school student for postsecondary credit shall not consist of substantially the same concepts and skills as the content of a course provided by the school district or accredited nonpublic school. The school district shall make this determination when a student submits an application for a PICC course. District staff including building principal, school counselors, and teachers have a significant role in advising and helping students enroll in appropriate coursework. Classes taken through PICC will be included on students' high school and college transcripts. If a student withdraws from a PICC course on their high school transcript.

The following courses through NICC have been reviewed and approved for students to take as PICC as courses. Please note that availability of these classes varies, and course offerings are determined by NICC. Students will need to check the NICC course catalog upon registration to see what courses are offered for the semester in which they are enrolling by visiting <a href="https://nicc.edu/Courses/">https://nicc.edu/Courses/</a>. Only under extenuating circumstances will students be allowed to take PICC courses outside of this approved list. Any additional requests must be approved by the PICC Approval Committee.

Agricultural Fertilizers and Chemicals (AGA 165) Business Law (BUS 185) Business Ethics (BUS 180) Children's Literature (EDU 235) Commercial Banking (FIN 114) Composition II (ENG 106) Criminology (CRJ 200) Crop Scouting (AGA 381) Developmental Psychology (PSY 121) Dosage Calculations (PNN 200) Foundations of Education (EDU 210) Human Sexuality (PSY 261) Intro to Criminal Justice (CRJ 100) Intro Cultural Anthropology (SOC 208) Intro to Ethics (PHI 105) Intro to Health Occupations (HSC 110) Intro to Nutrition (PNN 270) Intro to Philosophy (PHI 101) Intro to Religion (REL 105) Marriage and Family (SOC 120) Medical Terminology (HSC 114) Nurse Aid (HSC 172) Personal Finance (FIN 122) Principles of Management (MGT 101) Principles of Selling (MKT 140) Psychology of Human Relations (PSY 112) Russian History and Culture (HIS 214) U.S. History to 1877 (HIS 151)

#### **Post-Secondary Enrollment Options (PSEO)**

High school students may take college courses for both high school and college credit under the provisions of the Post-Secondary Enrollment Options Act/Senior Year Plus programming. Ninth and tenth grade students who are identified as Talented and Gifted (TAG) and eleventh and twelfth grade students who have demonstrated proficiency in all areas of the ISASP, may apply for enrollment in courses at any of the Regent schools or universities, or participating accredited private colleges in the State of Iowa with approval of building principal and at the expense of the school district. Students who fail the course or fail to receive credit in the course paid for by the school district must reimburse the school district for all costs directly related to the course. For the purposes of PSEO, courses requested may not be comparable to that of those offered by West Delaware School District. Comparable is not synonymous with identical, but means that the content of a course provided to a high school student for postsecondary credit shall not consist of substantially the same concepts and skills as the content of a course provided by the school district or accredited nonpublic school. The school district shall make this determination when a student submits an application for a PSEO course. Contact the High School TAG coordinator or the High School Counseling Office for further information. Classes taken through PSEO will be included on students' high school and college transcripts. If a student withdraws from a PSEO course past the institution's drop date, they will receive a W (Withdraw) on their college transcript and will receive an F for that course on their high school transcript.

#### Fall Semester Deadline: November 1, 2024 Spring Semester Deadline: May 9, 2025

#### **Transition Skills**

#### English Skills (Classroom enrollment by assignment only)

English Skills is designed to improve students reading comprehension, fluency and writing skills. Students will participate in activities to develop skills in vocabulary development, communication, and the process of writing. Each student will participate in activities based on the Iowa Core Essential Elements as well as their individual goals. Core concepts will be practiced and applied across content areas such as science and social studies and applied to real world situations. Students are assigned based on district criteria.

#### Mathematics Skills (Classroom enrollment by assignment only)

Explore Mathematics is designed to improve students' mathematics and financial literacy skills. Students will participate in activities to develop skills in operations with numbers and fractions, basic geometric terms, the start of writing and solving equations, collecting and organizing data, basic probability and financial literacy. Each student will participate in activities based on the Iowa Core Essential Elements as well as their individual goals. Core concepts will be practiced and applied across content areas and applied to real world situations. Students are assigned based on district criteria.

#### Science Skills (Classroom enrollment by assignment only)

Science Skills is designed to provide students with the skills and opportunities they need to read, write, think, and apply science in their everyday lives. The course provides the factual foundation necessary to understanding the principles of science discussed in the course. Units of study will focus on physical science, biology, and chemistry. Each student will participate in activities based on the Iowa Core Essential Elements. Connections to students' lives will be woven throughout the course. Students are assigned based on district criteria.

#### Social Studies Skills (Classroom enrollment by assignment only)

Social Studies Skills is designed to help students become informed citizens of a culturally diverse nation and an interdependent world. In this course, students experience and investigate key social studies concepts. Units of study will focus on civics, economics, American History, World History, and Government. Students will study the societies, ideas, and issues regarding the developing world and will focus on the diversity of human interaction. Connections to students' lives will be woven throughout the course. Students are assigned based on district criteria.

#### Transition Skills (Classroom enrollment by assignment only)

Transition Skills is designed to help students prepare to transition to life after high school. Students will develop skills align with the 21st Century Iowa Core around living (daily living concepts), learning (generalizing and transferring of academic knowledge and skills to real world applications) and working (vocational and employment). Units of study will include communication skills, decision making skills, daily living skills including hygiene, safety and careers exploration, setting & achieving goals, organization and time management. Students are assigned based on district criteria.

#### Grades 9, 10, 11 or 12

#### Iowa Page

A junior or senior who applies and is selected to serve as a Page or Legislative Clerk in the Iowa Legislature will receive up to 2 credits for the school semester they are working in the legislature.

The student will submit a written weekly report of the legislative activities to the American Government teacher at West Delaware. The teacher will be responsible for setting the requirements for what is expected on the paper and for grading the report. For this the student will receive one elective credit for each term successfully completed (maximum of two credits) on a pass/fail basis.

It is the student's responsibility to see that all reports are submitted on time.

A student who is working as a Page or Legislative Clerk may elect to not take any other high school courses during the term while on duty as a Page. Working as a Page does not replace the American Government class that is required of all seniors. The student may also be excused from physical education courses if participating in the Legislative Page Program at the state capitol for a regular session of the general assembly.

#### SENIOR YEAR PLUS (West Delaware High School Concurrent Credit Criteria)

The intent of the senior year plus statute is to ensure all students in Iowa have increased access to courses that have the potential to generate college credits while in high school.

The statute requires all students enrolling in college credit courses, with the exception of Career and Technical Education (CTE) courses, be proficient in reading, math and science. At West Delaware High School, Concurrent Credit classes include:

- Contracted courses at Northeast Iowa Community College
- Post-Secondary Enrollment Options Act courses (PSEO)
- College Credit Iowa Communication Network courses (ICN)

#### Senior Year Plus Programming

Code No. 602.12

The following factors shall be considered in the Board's determination of whether a student will receive credit toward the district graduation requirements through Senior Year Plus programming:

- the course is taken from a public or accredited private postsecondary educational institution;
- to be eligible to enroll in a course pursuant to this policy, a student shall demonstrate proficiency as defined in the High School Program of Studies in reading, mathematics, and science for an arts and science course, meet enrollment requirements established by the postsecondary institution, as well as be required to meet course prerequisites and/or achieve a satisfactory score on the College approved placement instrument;
- the course provided to a high school student for postsecondary credit supplements, and does not supplant, a course provided by the school district in which the student is enrolled. For purposes of this policy, to comply with the "supplement, not supplant" requirement, the content of a course provided to a high school student for postsecondary credit shall not consist of substantially the same concepts and skills as the content of a course provided by the school district;
- the course is a credit-bearing course that leads to a degree;
- the course is not religious or sectarian; and
- the course meets any other requirements set out by the Board.

Freshmen and sophomores in the TAG program and juniors and seniors who have implemented the postsecondary enrollment options (PSEO) of Senior Year Plus Programming will earn one high school credit for every three (3) semester hours of postsecondary credit in a subject area. Postsecondary credit not granted as semester hours will be prorated according to the postsecondary institution's guidelines.

Students enrolled in concurrent enrollment under Senior Year Plus Programming through a community college will earn credit as approved by a District and Community College agreement.

For PSEO courses, the school district is required to pay the cost of tuition, textbooks, materials and fees up to \$250 per course for eligible students who take a postsecondary course during the school year. The purchase of special equipment required by the course is the obligation of the student and parents.

Students who take courses during the summer months when school is not in session shall be responsible for the costs of attendance for the courses.

If a student begins a PSEO course but does not complete the course or does not pass the course, it still becomes part of the student's academic record. The cost of the course then becomes the responsibility of the student and parents.

For concurrent enrollment courses, the district is responsible for costs as agreed to in the agreement with the community college. Textbooks will be provided in the same manner as provided for other high school courses.

The parent or guardian of an eligible pupil who has enrolled in and is attending an eligible postsecondary institution shall furnish transportation to and from the eligible postsecondary institution for the pupil.

#### APPROVED CRITERIA ENSURING READING, MATH & SCIENCE PROFICIENCY:

Students must meet one of the following. Individual courses may have additional criteria.

- 1. The student is proficient on the reading, math, and science portions of the ISASP.
- 2. The student is proficient on the reading, math, and science portions of the ACT test. Proficiency is a score of 18 or higher.
- 3. The student is proficient on the Accuplacer Test. Proficiency is a score above the developmental level as determined by NICC. (NICC test requirement is a score of 250 on Accuplacer Next Generation 15 on the ALEKS math test). The student passing the Accuplacer Test and ALEKS test would still need to prove proficiency in science on the ISASP, ACT tests or specified course grades.
- 4. The student earned a B or higher in their most recent course in Science, Reading or Mathematics course.
- 5. The instructor from the most recent course in Science, Reading or Mathematics will use the following chart to determine if the student shows evidence of proficiency.

Specific concurrent credit courses may have different requirements. Please refer to course descriptions for more information.

Science Proficiency	Evidence of Proficiency
Interpreting Information:	
Makes inferences or predictions based on observed data	
Infers unstated relationships	
Extends conclusions to related phenomena	
Analyzing Scientific Investigations:	
Defines the problem of an experiment	
Discerns the rationale for a procedure	
Identifies limitations of a procedure	
Selects best procedure	
Analyzing and Evaluating Information:	
Distinguishes among hypotheses, assumptions, data & conclusions	
Judges the relevance and adequacy of information for reaching a given	
conclusion	
Selects the best evidence for answering a question	
Judges the reliability of sources	

Reading Proficiency	Evidence of Proficiency
Factual Understanding:	
Understands stated information	
Determines the literal meaning of words or phrases	
Inference and Interpretation:	
Draws conclusions or deduces meanings not explicitly stated	
in the text	
Infers relationships	
Infers the traits, feelings, and motives of the characters or individuals	
Makes predictions	
Applies information	
Interprets non-literal language	

Analysis and Generalization:	
Determines the main idea, topic, or theme of a passage or	
portion of a passage	
Identifies major points	
Makes generalizations and interprets non-literal language	
Identifies the author's or speaker's viewpoint or purpose	
Distinguishes among facts, opinions, assumptions,	
observations, conclusions	
Recognizes aspects of a passage's style, structure, mood or tone	
Recognizes literary or argumentative techniques	
Mada and in Deficience	
Mathematics Proficiency	Evidence of Proficiency
Understanding Mathematical Concepts and Procedures:	Evidence of Proficiency
Understanding Mathematical Concepts and Procedures: Selects appropriate procedures	Evidence of Proficiency
Understanding Mathematical Concepts and Procedures: Selects appropriate procedures Identifies examples and counterexamples of concepts	Evidence of Proficiency
Understanding Mathematical Concepts and Procedures: Selects appropriate procedures Identifies examples and counterexamples of concepts Data Interpretation:	Evidence of Proficiency
Understanding Mathematical Concepts and Procedures: Selects appropriate procedures Identifies examples and counterexamples of concepts Data Interpretation: Makes inferences or predictions based on data or information	Evidence of Proficiency
Understanding Mathematical Concepts and Procedures: Selects appropriate procedures Identifies examples and counterexamples of concepts Data Interpretation:	Evidence of Proficiency
Understanding Mathematical Concepts and Procedures: Selects appropriate procedures Identifies examples and counterexamples of concepts Data Interpretation: Makes inferences or predictions based on data or information	Evidence of Proficiency
Understanding Mathematical Concepts and Procedures: Selects appropriate procedures Identifies examples and counterexamples of concepts Data Interpretation: Makes inferences or predictions based on data or information Interprets data from a variety of sources	Evidence of Proficiency
Understanding Mathematical Concepts and Procedures: Selects appropriate procedures Identifies examples and counterexamples of concepts Data Interpretation: Makes inferences or predictions based on data or information Interprets data from a variety of sources Problem Solving:	Evidence of Proficiency
Understanding Mathematical Concepts and Procedures: Selects appropriate procedures Identifies examples and counterexamples of concepts Data Interpretation: Makes inferences or predictions based on data or information Interprets data from a variety of sources Problem Solving: Reasons quantitatively	Evidence of Proficiency

#### **CAREER PATHWAYS**

In partnership with Northeast Iowa Community College (NICC) a number of career pathways have been created based upon courses offered at West Delaware High School. A career pathway is intended to be an educational road map outlining a sequence of courses that prepares students for post-secondary programs that will lead to certificate and/or degree programs based upon student career interest. Multiple options for students include: early college credit beginning in high school, industry certification requirements, certificate or associate degrees, employment, and in some cases preparation for transfer to a college/university.

For more detailed information regarding specific credits for programs at NICC please contact the High School Counseling Office for a Career Planning guide.

#### **Automotive Career Pathway**

#### Freshman/Sophomore

Courses in the Applied Sciences Department are recommended for this pathway.

#### Junior/Senior

Course Code	Course	NICC Credits	Prerequisites
AUT:102	Introduction to Auto Technology	1	
Additional Recommended Courses			
WEL:330	*Welding Fundamentals	1	

\* Denotes a transfer-level course. However, students must consult with the advising staff at the transferring four-year institution to confirm the acceptance of the transfer.

#### Credits earned in these courses can be applied to the following programs at NICC:

Automotive Mechanics Diploma (Peosta)

#### **Career Options:**

Automotive Mechanic/Service Technician Automotive Service and Parts Clerk Farm Equipment Mechanic/Service Technician Industrial Technology Teacher Insurance Appraiser, Auto Damage Sales Representative

#### **Agriculture Career Pathway**

#### Freshman/Sophomore

Courses in the Agriculture Education Department are recommended for this pathway.

#### Junior/Senior

Course Code	Course	NICC Credits	Prerequisites
AGS:114	Survey of Animal Industry	2	
AGS:101	Working with Animals	2	
AGA:114	Principles of Agronomy	3	
Additional Recommended Courses			
ENG:105	*Composition I	3	qualifying placement score
MAT:156	* Statistics	3	qualifying placement score

\* Denotes a transfer-level course. However, students must consult with the advising staff at the transferring four-year institution to confirm the acceptance of the transfer.

#### Credits earned in these courses can be applied to the following programs at NICC:

Agriculture Business AAS Beef Science Technology AAS Dairy Science AAS Agriculture Finance AAS

#### **Career Options:**

Agriculture Educator	GPS Technician
Dairy Herd Supervisor	Livestock Producer
Feed and Supply Store Manager	Quality Control Specialist
Feed Sales Representative	

#### **Business Career Pathway**

#### Freshman/Sophomore

Courses in the Business/Technology Department are recommended for this pathway.

#### Junior/Senior

Course Code	Course	NICC Credits	Prerequisites		
WBL:110	Employability Skills	2			
Additional Recommended Courses					
ENG:105	* Composition I	3	qualifying placement score		

\* Denotes a transfer-level course. However, students must consult with the advising staff at the transferring four-year institution to confirm the acceptance of the transfer.

#### Credits earned in these courses can be applied to the following programs at NICC:

Accounting Clerk Diploma Accounting Specialist AAS Administrative Office Management AAS Business Administration AAS Construction Business Management Diploma

#### **Career Options:**

Account Executive	Human Resources Assistant
Accounts Receivable Clerk	Retail Manager
Administrative Assistant	Sales Representative
Computer Network Support Specialist	Web Developer
Customer Service Representative	-
-	

#### **Manufacturing Career Pathway**

#### Freshman/Sophomore (recommended)

Course Code	Course	NICC Credits	Prerequisites
EGT:400	PLTW: Introduction to Engineering Design (IED)	3	
EGT:410	PLTW: Principles of Engineering (POE)	3	EGT:400

#### Junior/Senior

Course Code	Course	NICC Credits	
WEL:427	Basic Arc Welding (SMAW)	3	WEL:228 & WEL:110
WEL:433	Basic Gas Metal Arc Welding (GMAW)	3.5	WEL:228 & WEL:110
WEL:110 & (Welding Blueprint Reading & Safety)		2, 1	
WEL:228			
WEL:434	Flame and Plasma Cutting	1.5	WEL:228
WBL:110	Employability Skills	2	
	Additional Recommended C	ourses	

\* Denotes a transfer-level course. However, students must consult with the advising staff at the transferring four-year institution to confirm the acceptance of the transfer.

#### Credits earned in these courses can be applied to the following programs at NICC:

CNC Machinist Technician Diploma Welding Diploma Engineering Technology AAS

#### **Career Options:**

CNC Machinist Gas Meter Mechanic and Installer Heating and Air Conditioning Mechanic and Installer Industrial Maintenance Technician Manufacturing Technician Quality Technician Welder Wind Turbine Repair Technician

#### **Engineering Technology Career Pathway**

Freshman/Sophomore					
Course Code	Course	NICC Credits	Prerequisites		
EGT:400	PLTW Introduction to Engineering Design (IED)	3			
EGT:410	PLTW Principles of Engineering (POE)	3	EGT:400 recommended		

#### Junior/Senior

Course Code Course		NICC Credits	Prerequisites	
EGT:400	PLTW Introduction to Engineering Design (IED)	3		
EGT:410 PLTW Principles of Engineering (POE)		3	EGT:400 recommended	
Additional Recommended Courses				

\* Denotes a transfer-level course. However, students must consult with the advising staff at the transferring four-year institution to confirm the acceptance of the transfer.

#### Credits earned in these courses can be applied to the following programs at NICC:

Engineering Technology AAS

#### Career Options: Civil Engineering

Civil Engineering Technician	Manufacturing Technician
Industrial Engineering Technician	Mechanical Engineering Technician
Industrial Maintenance Technician	Quality Technician

#### Welding (GMAW) Career Pathway Certificate

Recipients of this Certificate can enter the workforce ready for employment

#### Junior/Senior

Course Code	Course	NICC Credits	Prerequisites
WEL:110	Welding Blueprint Reading	2	
WEL:228	Introduction to Welding Safety and Health of Welders (OSHA 10)	1	
WEL:433	Basic Gas Metal Arc Welding (GMAW)	3.5	WEL:110 & 228

#### Credits earned in these courses can be applied to the following programs at NICC:

Welding Diploma Program

#### **Career Options:**

Manufacturing Fabrication Construction Structural Iron and Steel Worker Maintenance and Repair Worker Pipe Fitter and Steamfitter

#### **Basic Welding Career Pathway Certificate**

Recipients of this Certificate can enter the workforce ready for employment

#### Junior/Senior

Course Code	Course	NICC Credits	Prerequisites
WEL:110	Welding Blueprint Reading	2	
WEL:228	Introduction to Welding Safety and Health of Welders (OSHA 10)	1	
WEL:330	Welding Fundamentals	1	WEL:110 & 228

#### Credits earned in these courses can be applied to the following programs at NICC:

Automotive Mechanics Diesel Mechanics Engineering Technology Heating and Air Conditioning

#### **Career Options:**

Manufacturing Fabrication Construction Structural Iron and Steel Worker Maintenance and Repair Worker Pipe Fitter and Steamfitter

2/23 Calmar/Peosta		
	Northeast Iowa Community College	
	Associate of Arts (AA)	
	Educational Plan	
	2023-2024	
Name:	Student ID #	·····

It is the student's responsibility to understand and complete all degree requirements. A minimum cumulative GPA of 2.00 and a passing grade in all required courses is needed for graduation.

It is recommended that you work closely with your advisor as you select coursework that could fulfill requirements toward the major you wish to pursue at the four-year institution. Courses on this education plan may not be offered every semester or every academic year. Please discuss course availability with an academic advisor.

Reading requirement for all programs: The ability to read and comprehend information is a core value of Northeast Iowa Community College. A base reading assessment score or evidence of appropriate course completion will satisfy this requirement.

A Diversity course is a requirement for graduation. One of the following courses will satisfy this requirement: ASL:131, ASL:161, ASL:241, ASL:271, COM:148, FLS:141, FLS:142, FLS:241, FLS:242, HIS:214, HUM:108, LIT:115, LIT:134, SOC:208. This course will count toward the required credits in the Humanities, Social Science, or Remaining Requirements area.

COMMUNICATION (9 credits)						
Course #	Course #         Course Title         Trans. Inst.         Credit         Term/Yr.         Grade					
ENG:105	Composition I		3			
ENG:106	Composition II		3			
SPC:112	Public Speaking		3			

#### HUMANITIES (12 credits)

Transfer-level courses from two different disciplines required: ART, ASL, CLS, DRA, FLS, HIS, HUM, LIT, MUS, PHI, REL. One History course required: ART:203, ART:204, HIS:131, HIS:132, HIS:151, HIS:152, HIS:214; and one LIT:xxx Literature course required.

Course #	Course Title	Trans. Inst.	Credit	Term/Yr.	Grade
ART:101	Art Appreciation		3		

#### MATH/SCIENCE (10 credits)

A minimum of one transfer-level MAT and one transfer-level BIO, CHM, ENV, PHS, PHY required. One Science course must<br/>include a lab component.Course #Course TitleTrans. Inst.CreditTerm/Yr.GradeMAT:128Precalculus4MAT:156Statistics3

MAT:210

Calculus

SOCIAL SCIENCE (9 credits)						
Transfer-lev	Transfer-level courses from two different disciplines ECN, GEO, POL, PSY, SOC required.					
Course #	Course #         Course Title         Trans. Inst.         Credit         Term/Yr.         Grade					

4

REMAIN	NG REQUIR	EMENTS	(20 credits)	

	g semester hours will be accepted from trans				that up to 16		
semester hours of career-technical credit could be applied which includes SDV:179 The College Experience.							
Course #	Course Title	Trans. Inst.	Credit	Term/Yr.	Grade		
SDV:179	The College Experience		3				
WEL:110	Welding Blueprint Reading		2				
WEL:228	Intro Welding Safety & Health		1				
EGT:400	Intro Engineering Design		3				
EGT:410	Principles of Engineering		3				
WEL:228	Welding Safety		1				
WEL:427	SMAW		3				
WEL:433	Basic GMAW		3.5				
WEL:434	Flame/Plasma		1.5				
WEL:330	Welding Fundamentals		1				

2/23 Calmar/Peosta		
	Northeast Iowa Community College	
	Associate of Science (AS)	
	Educational Plan	
	2023-2024	
Name:	Student ID #	

It is the student's responsibility to understand and complete all degree requirements. A minimum cumulative GPA of 2.00 and a passing grade in all required courses is needed for graduation.

It is recommended that you work closely with your advisor as you select coursework that could fulfill requirements toward the major you wish to pursue at the four-year institution. Courses on this education plan may not be offered every semester or every academic year. Please discuss course availability with an academic advisor.

Reading requirement for all programs: The ability to read and comprehend information is a core value of Northeast Iowa Community College. A base reading assessment score or evidence of appropriate course completion will satisfy this requirement.

A Diversity course is a requirement for graduation. One of the following courses will satisfy this requirement: ASL:131, ASL:161, ASL:241, ASL:271, COM:148, FLS:141, FLS:142, FLS:241, FLS:242, HIS:214, HUM:108, LIT:134, SOC:208. This course will count toward the required credits in the Humanities, Social Science, or Remaining Requirements area.

COMMUNICATION (9 credits)						
Course #	Course Title	Trans. Inst.	Credit	Term/Yr.	Grade	
ENG:105	Composition I		3			
ENG:106	Composition II		3			
SPC:112	Public Speaking		3			

#### HUMANITIES/SOCIAL SCIENCE (12 credits)

Transfer-level courses: ART, ASL, CLS, DRA, ECN, FLS, GEO, HIS, HUM, LIT, MUS, PHI, POL, PSY, REL, SOC. One History course required: ART:203, ART:204, HIS:131, HIS:132, HIS:151, HIS:152, HIS:214.

Course #	Course Title	Trans. Inst.	Credit	Term/Yr.	Grade
ART:101	Art Appreciation		3		

#### MATH/SCIENCE (20 credits)

Transfer-level MAT and transfer-level: BIO, CHM, ENV, PHS, PHY required. One Science course must include a lab component.						
Course #	Course Title	Trans. Inst.	Credit	Term/Yr.	Grade	
MAT:128	Precalculus		4			
MAT:156	Statistics		3			
MAT:210	Calculus		4			

#### **REMAINING REQUIREMENTS (19 credits)**

The remaining semester hours will be accepted from transfer-level arts and sciences electives with the understanding that up to 16 semester hours of career-technical credit could be applied which includes SDV:179 The College Experience.

Course #	Course Title	Trans. Inst.	Credit	Term/Yr.	Grade
ACC:115	Intro to Accounting		4		
WEL:110	Welding Blueprint Reading		2		
WEL:228	Intro Welding Safety & Health		1		
EGT:400	Intro Engineering Design		3		
EGT:410	Principles of Engineering		3		
WEL:228	Welding Safety		1		
WEL:427	SMAW		3		
WEL:433	Basic GMAW		3.5		
WEL:434	Flame/Plasma		1.5		
WEL:330	Welding Fundamentals		1		