



**Waterloo** SCHOOLS

# **High School Planning Guide**

Course Catalog

## **East-West-Expo 2017-2018**

**Waterloo Community Schools**

1516 Washington St

Waterloo, IA 50702

319-433-1800

[www.waterlooschools.org](http://www.waterlooschools.org)





## **STATEMENT OF NON-DISCRIMINATION IN PROGRAMS AND EMPLOYMENT**

It is the policy of the Waterloo Community School District not to illegally 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 these policies, please contact the district's Equity Coordinator:

Dr. Bev Smith, Associate Superintendent for Human Resources and Equity  
1516 Washington Street, Waterloo, IA 50702  
Phone: 319-433-1800  
Email: [smithb@waterlooschools.org](mailto:smithb@waterlooschools.org)

## Dear Student and Parents,

High school is a critical time in a student's life. It's a transitional time when students are finishing their PK-12 learning experience and preparing to enter the next phase of their lives. As students prepare for life after high school, they know they'll experience opportunities and challenges their whole lives. They'll need to think globally, whether they stay in the Cedar Valley or choose a career across the United States or around the world. Our goal is to ensure students have limitless choices in their future by providing a spectrum of programs, opportunities and services.

We are not a one-size-fits-all district. We work diligently to add and adjust courses so students have a variety of options—a *continuum of course offerings*. To prepare our students for success:

- We have a broad and deep range of **challenging classes**, taught by great teachers. Our curriculum encompasses extensive college credit options (both Advanced Placement and dual credit courses), STEM (Science, Technology, Engineering & Mathematics), International Baccalaureate®, Career-Based Pathways, cross-curricular opportunities and project-based learning. These classes and programs all use advanced technology to engage students in active learning.
- Our students learn **leadership** and experience hands-on, real-world situations beyond the traditional classroom.
- Our schools are **welcoming and supportive environments**.
- Our **diversity** prepares students for success in the national community and global economy.
- Our **parent and community** involvement has led to even greater educational opportunities for our students.
- Our students have **Limitless Choices** for college, career and citizenship.
- We have embarked on a journey to enhance our **Career Technical Education** offerings. Currently we offer Nursing and Digital Graphics at our "Waterloo Career Center," located at Central Middle School. Beginning in the fall of 2017, we will add three additional programs: Information Technology, Advanced Manufacturing, and Early Childhood Education.

We are pleased to provide you with this **High School Planning Guide/Course Catalog** which details all of the options of coursework in our high schools. As always, some courses are required, while others can be chosen by students and parents based on need and/or interest. We are confident the courses offered in this catalog provide a spectrum of options that will meet the needs of all students.

We collaborate with post-secondary institutions, like Hawkeye Community College and the University of Northern Iowa, to ensure our courses prepare students for education after high school. Again, we are creating increased opportunities for students to take higher level classes and earn college credit while they are still a part of our student body.

We look forward to providing you with an educational experience that exceeds our state requirements, leads to success after graduation and makes the high school years meaningful, engaging, and personalized. We also encourage students to be part of sports teams, fine arts and other extra-curricular activities that are so important to high school life. For additional information about new programs and to stay up-to-date on district events, visit our web page ([www.waterlooschools.org](http://www.waterlooschools.org)), like us on Facebook, follow us on Twitter (@Waterloo Schools) and look for us on YouTube.

As you create your 4 year-plan of high school courses with your counselor, teachers, and family **you will be making important choices that will impact your future**. I urge you to take this task very seriously. Please let us know how we can assist you in this process. We wish you every success now and in the future, and **thank you** for choosing Waterloo!

Dr. Jane Lindaman  
Superintendent  
Waterloo Community Schools



## Waterloo Community School District

<http://www.waterlooschools.org>

### Mission

The Waterloo Schools community commits to a comprehensive system of education and support to assure that each and every Waterloo student will graduate ready for college, career, and citizenship as evidenced by continuing education, pursuing a career path and contributing to a community.

### Goals

(SY 18-19)

#### People

Recruit, hire and retain a diverse, high-performing workforce aligned with district values and goals.

#### Achievement

Increase achievement for all students through rigorous curriculum, high expectations, and effective delivery of instruction, with assessment for improved teaching and increased learning.

#### Community

Initiate, strengthen and engage in community partnerships that result in the academic, social, and behavioral success of each and every student.

#### Environment

Provide an optimal learning environment that is safe, inspiring and welcoming, where all individuals are respected, valued and engaged. Secure, organize, and optimize financial resources for human assets, programs and operations that support student achievement.

### Board of Education

Shanlee McNally, President

Sue Flynn

Mike Kindschi

Jesse Knight

Rhonda McRina

Lyle Schmitt

Angela Weekley

### Waterloo School District Administrative Support

Superintendent .....	Dr. Jane Lindaman
Associate Superintendent for Human Resources and Equity .....	Dr. Beverly Smith
Associate Superintendent for Educational Services .....	Dr. Charles McNulty
Executive Director of Financial Services .....	Michael Coughlin
Executive Director of Professional Technical Education .....	Jeff Frost
Executive Director of Student and At-Risk Services .....	Cora Turner
Executive Director of Supplemental Services .....	Dr. Willie Barney
Coordinator of IB and Advanced Programming .....	Sherice Ortman
Director of Curriculum .....	Comfort Akwaji-Anderson
Director of Elementary Education .....	Darren Hanna
Director of Middle School Education .....	
Director of School and Community Relations .....	Tara Thomas
Director of Operations .....	Marty Metcalf
Educational Technology Specialist .....	Ron Morlan



# Welcome to the High School Planning Guide /Course Catalog SY 2018-2019

The HS Planning Guide reflects the Waterloo Community School District belief that every student should be on a path that leads to career success and college preparedness through seamless plans of study that foster academic and technical achievement. The goal is to develop a globally competitive workforce for Iowa and more importantly connect students to rigorous and relevant curriculum. Engagement in the courses outlined in this Planning Guide will enhance our students' ability to compete competitively in the new economy.



Our revisions include not only Career and Technical Pathways and Plans of Study, but also include pathways for Military Sciences, International Baccalaureate, Performing Arts, and Liberal Arts. The desire is to address student interests and passions in as many ways as possible through CTE and comprehensive studies programming, including performing arts, visual arts, advanced programming, etc.

Academic and career pathways are defined as an integrated collection of programs and services intended to ...

- develop students' core academic, technical, and employability skills,
- provide students with continuous and sequenced rigorous education and training,
- place students in high-demand, high opportunity employment, and
- prepare students for success as college students.

The new format of the Planning Guide is organized through *Academies*, *Career Education Service areas*, and *Plans of Study*. This organization structure helps students create their individual career option plans and empowers them to choose the educational pathway aligned to their interests and passions ([www.careertech.org/career-clusters](http://www.careertech.org/career-clusters)).

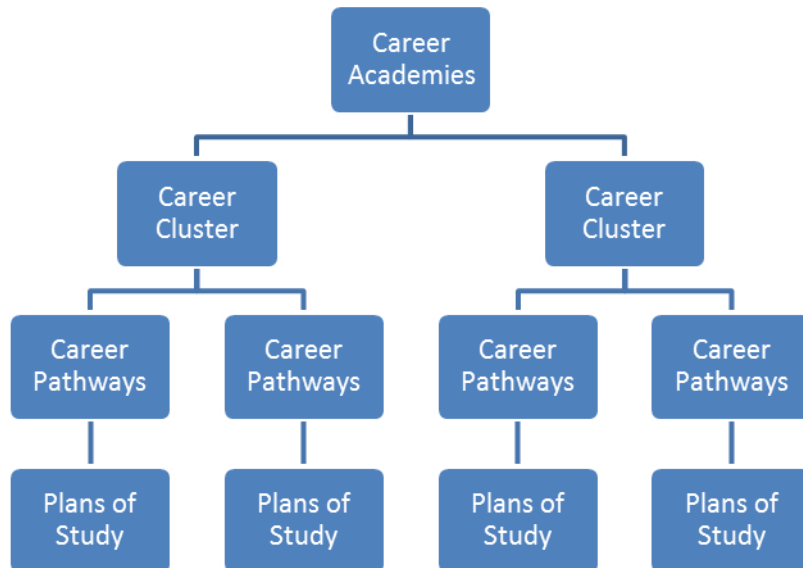
- Academies are the overarching general areas comprised of multiple Career Clusters. We use the Academies to organize students into smaller groups for the purpose of a more personalized instructional environment.
- The 6 Service Areas are defined by the State of Iowa as areas where school districts are required to offer Career classes in 4 of the 6 areas.
- The 16 Career Clusters provide the structure for organizing and delivering CTE programs. They also serve as an organizing tool for curriculum design and instruction as well as a guide in bridging programs between secondary and postsecondary curriculum.
- The 79 Career Pathways further subdivide the Career Clusters in general career areas.
- Plans of Study break the Career Pathways into employment areas and highlight specific sequences of courses for students to take within their career interests.

**Our targeted purpose is that every single student in our district graduates prepared for his/her postsecondary choice of work, college, and citizenship – their choice! We are committed as educators to do everything in our power to make that happen for each of our students.**

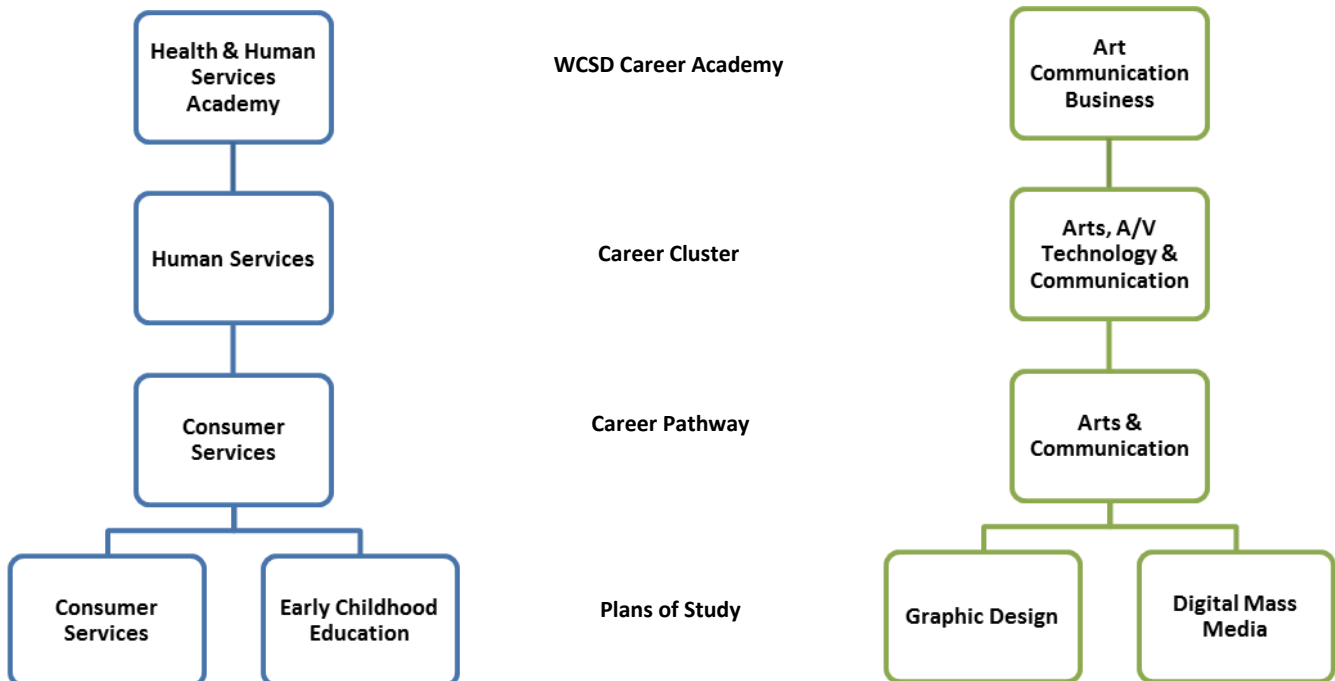


## Hierarchy Organization

### Career Academies, Clusters, Pathways, and Plans of Study



### Examples from the HS Planning Guide



# High School Administrative Teams

## East High School Administration

Phone: 319.433.2400

<http://www.easthigh.waterlooschools.org>

Principal ..... Marla Padget  
 Assistant Principal..... Bryan Jurrens  
 Assistant Principal..... Josh Payton  
 Assistant Principal..... Sharrie Phillips  
 Assistant Principal..... Brenton Shavers  
 PBDA Coordinator ..... Mike Penning

### East High School Counseling Center

Counselor, ACB.....Darius Hart  
 Counselor, ETM..... Allison Witt  
 Counselor, HHS..... Nykole Miller  
 Counselor, PBDA ..... Rebecca Renze

## West High School Administration

Phone: 319.433.2700

<http://www.westhigh.waterlooschools.org>

Principal .....Andy Miehle  
 Assistant Principal.....Allison Hildman  
 Assistant Principal.....Zach O'Brien  
 Assistant Principal.....Byron Phillips  
 Assistant Principal..... Steve Winters  
 PBDA Coordinator..... Ashley Reimer

### West High School Counseling Center

Counselor, ACB .....  
 Counselor, ETM.....  
 Counselor, Health ..... Kayann Lilja  
 Counselor, Human Services ..... Jessica Wass  
 Counselor, PBDA..... Marsha Watters

## Expo Alternative Learning Center

Phone: 319.433.1930

<http://www.expo.waterlooschools.org>

Principal ..... Cary Wieland  
 Assistant Principal ..... Henry Shepherd  
 Assistant Principal ..... Charlotte Coleman  
 Counselor A-H..... Shannon Prehm  
 Counselor I-Q ..... Melissa Knight  
 Counselor R-Z ..... Brad Hamlyn



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## WCSD Graduation Requirements

### Graduating Classes of 2019 and 2020

Students must also achieve a national standard score of 263 on both the Level 17/18 Reading Test and Level 17/18 Math Test of the Iowa Assessment. Students with IEPs or 504 plans may be exempt from this requirement.

#### Standard Diploma Requirements

##### Credits

English	8 (must include English 9, 10, Am. Lit./Comp)
Mathematics	6 (must include Algebra I or equivalency)
Science	6 (must include 2 biology and 2 physical science credits)
Social Sciences	
U.S. History	2
World History	2
Contemporary Affairs	1
U.S. Government	1
Economics	1 (Economics, JA Economics or Beginning Personal Finance)
C <sup>3</sup> Foundations	1
Health	1
Physical Education	4 (or equivalent exemptions)
Career Technical Courses/Electives	11+

**Credits for Graduation with a Standard Diploma   44+**

#### Honors Diploma Requirements

##### Credits

English	8 (must include English 9, 10, Am. Lit./Comp)
Mathematics	6 (must include Algebra I or equivalency)
Science	6 (must include 2 biology and 2 physical science credits)
Social Sciences	
U.S. History	2
World History	2
Contemporary Affairs	1
U.S. Government	1
Economics	1 (Economics, JA Economics or Beginning Personal Finance)
C <sup>3</sup> Foundations	1
Health	1
Physical Education	4 (or equivalent exemptions)
Career Technical Courses/Electives	20+

**Credits for Graduation with an Honors Diploma   53+**

Students must also successfully complete five advanced courses from PSEO (Post Secondary Enrollment Option), AP (Advanced Placement), IB (International Baccalaureate), and/or Concurrent Courses, which can include CTE (Career Technical Education) courses. The five advanced courses must be year-long courses. Semester courses count as .5 in meeting the requirement of five advanced courses.

#### Core Diploma Requirements

##### Credits

English	8 (must include English 9, 10, and a writing course)
Mathematics	6 (must include Algebra I or equivalency)
Science	6 (must include biology and physical science credits)
Social Sciences	6 (must include US History, World History, and US Government)
Economics	1 (Economics, JA Economics or Beginning Personal Finance)
C <sup>3</sup> Foundations	1
Health	1
Physical Education	4 (or equivalent exemptions)
Career Technical Courses/Electives	2-10

**Credits for Graduation with a Core Diploma   35-43**



## WCSD Graduation Requirements Graduating Class of 2021 and beyond

Students must also achieve a national standard score of 263 on both the Level 17/18 Reading Test and Level 17/18 Math Test of the Iowa Assessment. Students with IEPs or 504 plans may be exempt from this requirement.

### Standard Diploma Requirements

#### Credits

English	8 (must include English 9, 10, Am. Lit./Comp)
Mathematics	6 (must include Algebra I or equivalency)
Science	
Earth & Space Science	2
Biology	2
<b><i>And One of the Following Combinations:</i></b>	
Physical Science A & B	2
Physical Science A & Chemistry A/B	3
Physical Science B & Physics A/B	3
Chemistry A/B & Physics A/B	4
Social Sciences	
U.S. History	2
World History	2
Contemporary Affairs	1
U.S. Government	1
Economics	1 (Economics, JA Economics or Beginning Personal Finance)
C <sup>3</sup> Foundations	1
Health	1
Physical Education	4 (or equivalent exemptions)
Electives	11+

**Credits for Graduation with a Standard Diploma   44+**

### Honors Diploma Requirements

#### Credits

English	8 (must include English 9, 10, Am. Lit./Comp)
Mathematics	6 (must include Algebra I or equivalency)
Science	
Earth & Space Science	2
Biology	2
<b><i>And One of the Following Combinations:</i></b>	
Physical Science A & B	2
Physical Science A & Chemistry A/B	3
Physical Science B & Physics A/B	3
Chemistry A/B & Physics A/B	4
Social Sciences	
U.S. History	2
World History	2
Contemporary Affairs	1
U.S. Government	1
Economics	1 (Economics, JA Economics or Beginning Personal Finance)
C <sup>3</sup> Foundations	1
Health	1
Physical Education	4 (or equivalent exemptions)
Career Technical Courses/Electives	20+

**Credits for Graduation with an Honors Diploma   53+**

Students must also successfully complete five advanced courses from PSEO (Post Secondary Enrollment Option), AP (Advanced Placement), IB (International Baccalaureate), and/or Concurrent Courses, which can include CTE (Career Technical Education) courses. The five advanced courses must be year-long courses. Semester courses count as .5 in meeting the requirement of five advanced courses.

## WCSD Graduation Requirements Graduating Class of 2021 and beyond

### Core Diploma Requirements

#### Credits

English	8 (must include English 9, 10, and a writing course)
Mathematics	6 (must include Algebra I or equivalency)
Science	6 (must include Earth and Space Science, Biology, and Physical Science)
Social Sciences	6 (must include US History, World History, and US Government)
Economics	1 (Economics, JA Economics or Beginning Personal Finance)
C <sup>3</sup> Foundations	1
Health	1
Physical Education	4 (or equivalent exemptions)
Electives	2-10

**Credits for Graduation with a Standard Diploma    35-43**

### WCSD Graduation Requirements Checklist

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li><input type="checkbox"/> English 9 or Adv English 9 (1<sup>st</sup> semester)</li> <li><input type="checkbox"/> English 9 or Adv English 9 (2<sup>nd</sup> semester)</li> <li><input type="checkbox"/> English 10 or Adv English 10 (1<sup>st</sup> semester)</li> <li><input type="checkbox"/> English 10 or Adv English 10 (2<sup>nd</sup> semester)</li> <li><input type="checkbox"/> American Literature/Comp (or Advanced American Literature and Advanced Composition)</li> <li><input type="checkbox"/> English Elective</li> <li><input type="checkbox"/> English Elective<br/>(A Writing Elective is highly recommended)</li> <br/> <li><input type="checkbox"/> Algebra I (1<sup>st</sup> semester) or Alg I pt I A/B</li> <li><input type="checkbox"/> Algebra I (2<sup>nd</sup> semester) or Alg I pt II A/B</li> <li><input type="checkbox"/> Math</li> <li><input type="checkbox"/> Math</li> <li><input type="checkbox"/> Math</li> <li><input type="checkbox"/> Math</li> <br/> <li><input type="checkbox"/> Earth and Space Science or Adv Earth and Space Science (1<sup>st</sup> semester)</li> <li><input type="checkbox"/> Earth and Space Science or Adv Earth and Space Science (2<sup>nd</sup> semester)</li> <li><input type="checkbox"/> Biology or Adv Biology (1<sup>st</sup> semester)</li> <li><input type="checkbox"/> Biology or Adv Biology (2<sup>nd</sup> semester)</li> <li><input type="checkbox"/> Physical Science A (1st semester) &amp; Physical Science B (2nd semester)</li> <li>OR</li> <li><input type="checkbox"/> Physical Science A (1st semester) &amp; Chemistry A (1st semester) &amp; Chemistry B (2nd semester)</li> <li>OR</li> <li><input type="checkbox"/> Physical Science B (2nd semester) &amp; Physics A (1st semester) &amp; Physics B (2nd semester)</li> <li>OR</li> <li><input type="checkbox"/> Chemistry A (1st semester) &amp; Chemistry B (2nd semester) &amp; Physics A (1st semester) &amp; Physics B (2nd semester)</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> U.S. History (1<sup>st</sup> semester)</li> <li><input type="checkbox"/> U.S. History (2<sup>nd</sup> semester)</li> <li><input type="checkbox"/> World History or Adv World History (1<sup>st</sup> semester)</li> <li><input type="checkbox"/> World History or Adv World History (2<sup>nd</sup> semester)</li> <li><input type="checkbox"/> Contemporary Affairs or Adv Cont. Affairs or Arab Israeli Conflict</li> <li><input type="checkbox"/> U.S. Government</li> <li><input type="checkbox"/> Economics (Junior Achievement, or Social Sciences)</li> <br/> <li><input type="checkbox"/> Physical Education credits (4 credits)</li> <li><input type="checkbox"/> C<sup>3</sup> Foundations</li> <li><input type="checkbox"/> Health and Life Management</li> <li><input type="checkbox"/> Electives</li> </ul> |
|--|--|

## SCHEDULING CLASSES

### Planning Schedules

Course offerings, staff assignments and the master schedule for the following school year are determined by students' initial course requests. Based on those requests some courses may not be offered in the "final" master schedule. Four-year academic plans are created in 8<sup>th</sup> grade that incorporate appropriate course selections for students' future career interests. In addition to core requirements identified in the plan, electives are also chosen and should be selected to strengthen a student's area of career interest. The four-year plans are reviewed annually throughout high school.

Only students with Senior status will be allowed to arrive late and/or leave early during the school day. This is a special request and granted on the basis of need. Final approval is given by the building principal.

### Academic Load/Academic Probation

Students are required to carry a minimum academic schedule of 5 courses (excluding PE) each semester. Students may request a voluntary schedule reduction to fewer than 5 courses per semester, which results in academic probation. This process is initiated with the counselors and requires administrator, parent, student and counselor approval. Students may be placed on academic probation by administrators for disciplinary, behavior, or attendance reasons. This process is initiated with the assigned administrator. Course enrollment includes dual enrollment, work experience, and post-secondary courses. (Policy 603.2)

### Schedule Changes

All schedule changes are initiated through the counselors. Schedule changes for reasons other than inappropriate or incorrect course placement are kept to a minimum and made on a "space available" basis. Changes must be completed prior to the first day of classes in each semester.

### Dropping a Course

Students may drop a course prior to the **tenth school day** of class in any semester. The dropped course will not affect the student's grade point average (GPA). For students who are academically exempt from PE, dropping a course rescinds the PE exemption, and PE will be added to the students' schedules. Students who are removed from a class as a result of their behavior or attendance or those who voluntarily drop a class after the tenth day of the semester will lose credit for the class and receive a failing grade. Students who are administratively "withdrawn" from a course will receive no grade, and it will not affect the GPA.

### Withdrawing From a Course

Students who receive an "F" at the end of the first and third quarters may request to withdraw from the course. A student taking seven or more classes may withdraw from up to two classes and a student taking five or six courses may withdraw from one class. This option only applies to students taking five or more academic classes. A request to withdraw from a course can occur two weeks or ten school days after the end of the first and third quarters. Approval is required from the parents and the building principal/administrator. The withdrawn course will not affect the student's grade point average (GPA). A student who is taking an academic course as pass/

fail and receives an "F" or "NC" at the end of the semester will still be considered as an "F" for eligibility purposes.

### Zero Hour Classes

Zero hour classes meet from 6:45 – 7:30 AM and may be offered for selected classes. After students have completed course requests, teacher availability and student interest are considered, and decisions are made about which classes will be offered for Zero hour. The school day for students who attend Zero hour classes ends after sixth period, but students have the option of taking an eighth class. Students are responsible for their own transportation if they register for a Zero hour class. Zero hour classes **will not** meet on inclement weather days when school begins one or two hours late.

### Attendance Policy

There is a strong correlation between consistent attendance and successful completion of high school courses. Students who accumulate excessive excused absences can expect that their achievement will be affected even though work may be made up. Excessive absences in a class will cause the administration to recommend a student be removed from the course. Interventions will be explored for excessive excused absences.

(Policy 509.0 and 509.0-R)

### Grade Level Placement

A student's grade level placement is determined by the number of completed credits. Students who have questions about their grade level placement are advised to check with their counselor.

#### **At the beginning of the first semester of the school year:**

Students who have earned 11 credits are classified as 10<sup>th</sup> grade.

Students who have earned 22 credits are classified as 11<sup>th</sup> grade.

Students who have earned 33 credits are classified as 12<sup>th</sup> grade.

## LEARNING SUPPORT

### Educational Alternatives

Students may apply and/or be assigned in various alternative education programs in our district. Various alternatives may be utilized to help students complete graduation requirements. Some alternatives include After Hours Program, Crossroads Connection, GRAD Connect, and Virtual School. Students are advised to contact their administrator or counselor for more information.

### Credit Recovery

Students who fail a required class will have the opportunity to recover the credit by retaking the course. This may be done by using the districts' on-line learning system facilitated by a teacher. On-line recovery is offered in the summer and during the school year.

### Tutoring and Academic Support

It is our intent that all students will be successful and earn a diploma. Several options exist for academic help. Please contact your counselor/teacher/administrator for information about tutoring programs.

## ADDITIONAL OPTIONS for LEARNING

### Weighted Grades

Weighted grades are applied in Advanced Placement and International Baccalaureate courses. This recognizes the academic rigor of these courses and means students will be graded on a 5-point scale rather than a 4-point scale. Grades will be weighted as follows: A = 5.0; B = 4.0; C = 3.0; D = 2.0. Plus and minus will also be used when calculating the grade point average.

### Auditing a Class

Students may retake a course in which previous credit has been earned on an "audit" basis. The student follows all classroom, course and attendance requirements. Completion of the course is recorded as "Aud" or no credit.

### Acceleration Option

In accordance with WCSO Policy 602.3 and 602.3R, secondary students have the opportunity to test out of a core course through the acceleration option. Each content department will determine and administer the appropriate assessment(s) to determine mastery of the course. In addition, students may accelerate through completing online course assessments. Standards and content focus areas will be available to students prior to the testing. This option is exercised in the spring semester prior to fall enrollment upon written request from the student and parent. It is highly recommended that the policy be thoroughly reviewed and that the application to accelerate be made sufficiently in advance and no later than March 1 to ensure timely completion by June 1. The policy includes further explanation of how acceleration will be determined and lists how demonstration of mastery will be evidenced. If acceleration is granted, transcripts will be noted with an A and the course title. Students interested in this option should contact the appropriate counselor, department chair, or principal.

(Policy 602.3 and 602.3-R2)

### Independent Study Coursework

Independent study is available on a limited basis for eligible students with unique learning situations. Students may contact their counselor for information concerning independent study.

### International Baccalaureate Program (IB)

The International Baccalaureate Diploma Program provides an international standard of excellence and intellectual rigor for college-bound students worldwide. The IB Organization aims to develop inquiring, knowledgeable, and caring young people to help create a better and more peaceful world through intercultural understanding and respect. To this end the IBO works with schools, governments, and international organizations to develop challenging programs of international education and rigorous assessment. These programs encourage students across the world to become active, compassionate, and lifelong learners who understand that other people, with their differences, can also be right.

This rigorous program provides high school students an opportunity to take college level classes while still in high school. Many colleges offer credit at their institutions for IB courses taken in high school. Students should be sure of the specific policies at colleges they are interested in attending.

The International Baccalaureate Program in Waterloo will be a two year course of study for juniors and seniors encompassing six curriculum areas. Enrollment in the IB program requires an applica-

tion through the IB coordinator at each school. For more information contact the Administrator for Advanced Learning Programs, at (319)433-1800.

### Outside Credits

In addition to credits earned in the Waterloo Community School District (WCSO), students who are residents of the WCSO may earn four (4) credits from another accredited institution or high school. This does not include credits for students: (a) placed in treatment programs and placements by Juvenile Court Services and the Department of Human Services, (b) participating in Post Secondary Enrollment Options, or (c) attending an institution of higher learning through an articulation agreement, such as Hawkeye Community College or University of Northern Iowa.

Students may transfer more than four (4) credits under special circumstances approved by a building administrator. Credits from Waterloo alternative programs are not considered outside credits. These credits are recorded as letter grades for inclusion in the student's grade point average.

In order to be transferred, outside credits must be taken at educational institutions approved by WCSO. These include schools approved by the Iowa Department of Education, or appropriate regional accrediting association, such as North Central Association of Colleges and Secondary Schools. A Waterloo Schools building administrator must approve the course before the student enrolls in the course. Questions concerning program approval/non-approval may also be directed to the Associate Superintendent for Educational Services.

(Policy 502.3)

Outside credits count toward graduation requirements, but the grades do not count on the student's GPA. The credits are recorded as "P" for passing or "F" for not passing.

### Pass/No Credit Option

A high school student wishing to receive pass/no credit for a subject must:

1. Be enrolled in at least 6 courses, excluding physical education.
2. Have prior written approval of the student's parent/guardian and counselor.
3. Make a final determination, no later than the end of the sixth week, to either continue in the course on a pass/no credit basis or take a letter grade. A pass/no credit form must be turned in to the Counseling Center by the end of the sixth week.
4. Complete all work required in the subject of students under the regular grading system.

The pass/no credit option is not available for required core classes. Core classes are defined as academic subjects in the areas of English, science, mathematics, and social sciences. Required courses in the non-academic areas as well as electives may be taken pass/no credit. Students will have the opportunity of choosing one course per semester as pass/no credit, however, no more than 4 pass/no credit credits may be taken over the four-year high school career. A no credit will be recorded as "No Credit" and will not result in a penalty to the student's grade point average.

(Policy 505.7R)

## **Physical Education Exemption**

Students not exempt are required to take Physical Education one semester each school year they are enrolled.

In accordance with Iowa State Law (Chapter 12) and the Waterloo Community School District Policy (Policy 602.9-R), students may exempt from Physical Education under the following conditions:

- Academic exemption (1) The student must be taking a full academic load (9th - 12th grades). If a course is dropped, the exemption is rescinded. (2) the student is in an approved cooperative, work study or other educational school authorized program which requires the student's absence from the school's premises during the school day (12th grade only)
- Athletic exemption (9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grade students may exempt for one semester during their season of athletic participation; eligible participation includes those sports sanctioned by the Iowa High School Athletic Association and the Iowa High School Girls Athletic Association and/or activities recognized by the Waterloo Community Schools. Band, cheerleading, dance team, hockey, color guard, JROTC, and trapshooting are not included because they are non-sanctioned activities. 12<sup>th</sup> grade students may be exempt both semesters if they are participating in eligible sports.)  
1<sup>st</sup> semester athletic exemptions: Football, Volleyball, Boys Golf, Girls/Boys Cross Country, Girls/Boys Swimming, Girls/Boys Basketball, Wrestling, Girls/Boys Bowling  
2<sup>nd</sup> semester athletic exemptions: Girls/Boys Basketball, Wrestling, Boys Swimming, Girls/Boys Bowling, Girls/Boys Track, Girls Golf, Girls/Boys Soccer, Girls/Boys Tennis
- Medical exemption (medical doctor's permanent-medical excuse)
- Religious exemption (documented religious excuse) (Policy 602.9-R)

## **Retaking a Course**

A student who earns a D or F in a course may retake the course. A subsequent higher grade will replace the previous D or F, but the student will not receive an additional credit for re-taking the course in which credit has already been earned. The new grade will be recorded as the grade for the course and will be included in computing the grade point average and class rank. The transcript will retain the course and title from the first effort. Any student who retakes a course will not be considered for valedictorian status at the time of graduation. In addition, if a student fails a course with a score of 55-59%, the student may choose to take the Cumulative Exam through the corresponding Egnuity course existing within the list of available courses. The student should request to take the Cumulative Test within 10 school days after the semester ends. If the student earns a 70% or above on the Cumulative Test, then the course grade will be a C. If the student earns a 60-69% on the Cumulative Test then the course grade will be a D. The results will be treated as noted above for retaking a course in regard to how the grade is recorded, how the grade is used in computing grade point average, and valedictorian status.

## **Shared Coursework with East or West**

Students may enroll in a class at East or West if it is not offered to them at their home school. Students must see their counselor to enroll in these courses. Transportation is provided, if needed, for travel between schools to accommodate students taking JROTC

courses, I-JAG (Iowa Jobs for America's Graduates) courses, and/or other courses not offered at their home schools.

## **Summer Courses/Academic Eligibility**

The Iowa Athletic Association does not allow a student to use summer courses to meet eligibility requirements. A student may repeat a failed course in summer school or at an approved institution; however, it will not be used to determine eligibility. The letter grade will be recorded for the spring semester after an official transcript has been received.

## **Transfer Credit / Enrollment**

Students attending a Non-Accredited Educational Institution:

Students who have attended a non-approved education institution may enroll in Waterloo high schools up to the last two (2) weeks of the school year. The records and transcripts of enrolling students will be reviewed and, if needed, an assessment will be given to determine placement in the most appropriate educational program.

(Policy 502.2-R)

## **Students Re-Entering High School**

At the discretion and approval of the building principal, students enrolling after the 10th day of the semester or who have not attended another school within a two-week transfer period can enroll either at the high school or in an alternative program. Alternative programs include enrollment in Expo Alternative Learning Center, enrollment in the Graduate with Required Academics and Diploma program (GRAD Connection), or a reduced academic load. Students entering an alternative program and earning credit may enroll in East High School or West High School the following semester.

English Language Learner (ELL) students and students with Individual Educational Programs (IEPs) will be considered individually.

(Policy 502.2-R)

# **GRADUATION**

## **Commencement**

Students participating in commencement exercises must have met all graduation requirements by the published deadline date. In order for students to participate in commencement exercises, all graduation requirements must be met, all fees and fines must be paid, and students must attend commencement practice. Students are not permitted to participate in commencement if they have not met EVERY requirement. Students are not required to participate in the graduation ceremony.

Students who complete graduation requirements after the specified graduation deadline will graduate with the next year's class.

(Policy 602.5 VI)

## **Early Graduation**

Students have the option of graduating at the end of their junior year if all graduation requirements have been met, the minimum score requirement on the Iowa Assessments as stated in board Policy 602.5 has been attained, and the request has been approved. The appropriate Early Graduation Form may be obtained from the student's counselor. The request requires approval from the parent, counselor, assistant principal (scheduling), and Associate Superintendent for Educational Services. Students can only graduate early on a Standard Diploma or Honors Diploma.

## **Midyear Graduates**

Students also have the option of completing graduation requirements at the end of the first semester of the senior year. Midyear graduates receive their diplomas at Commencement with their class. Students may schedule for this option with their counselors/deans.

## **Special Graduation Recognition**

Top graduates are honored during commencement exercises. Students who have demonstrated superior performance, such as a high Grade Point Average, an Honors Diploma, and other similar high levels of achievement will be honored.

# **THINKING about the FUTURE**

## **Testing**

In preparation for entry into a post-secondary institution, students need to plan for additional testing beyond the required assessments completed in high school. Sophomores and Juniors are encouraged to take the PSAT/NMSQT (Preliminary Scholastic Achievement Test/National Merit Scholarship Qualifying Test) if they are likely to qualify for National Merit standing or if they plan to enter a post-secondary institution that requires an SAT test.

ACT (American College Test) or SAT (Scholastic Achievement Test) are optional tests, but are required by many colleges and universities for admission. These tests charge fees, which need to be paid by the student. If a chosen college or university requires the ACT or SAT, students should complete the application process well in advance of the time they wish to take the tests. Application deadline dates and test dates can be obtained from the Counseling Services. Students who plan to attend a four-year college are encouraged to take the ACT or SAT Test in the spring of their junior year and re-take it in the fall of their senior year, if necessary.

## **Advanced Placement Courses/Testing**

Advanced Placement is a program of college-level courses and examinations available at the high school level. Many colleges and universities award AP college credits based on students' scores on the national AP exams. AP Examinations are given in May on a national test schedule. All students enrolled in Advanced Placement courses will complete the AP Examinations. The exams will be paid for by the Waterloo Community Schools. Students who are not enrolled in AP courses may also pay to take the AP examinations. The Advanced Placement coordinator should be contacted for registration, payment, and testing information.

## **Post-Secondary Enrollment Options**

Under the Post-Secondary Enrollment Options Act (PSEO), eligible juniors and seniors may attend a post-secondary institution while enrolled in high school. Freshmen and sophomores who have been identified for Talented and Gifted programming are also eligible for PSEO.

If a student enrolls in a course for which there is no comparable course offered in the Waterloo Community Schools, with prior approval from the Associate Superintendent for Educational Services, the school district may pay up to a maximum of \$250 per course for tuition. Post-secondary institutions require students to meet appropriate standards or requirements for entrance into a course. Students provide their own transportation to attend the PSEO courses at postsecondary institutions.

The PSEO includes very specific and detailed guidelines. It is

important that students consult with their counselors for specific information, enrollment forms, and assistance with the PSEO registration process.

**NOTE:** Registration deadline for a PSEO fall course is May 15th and the registration deadline for a spring course is November 30th.

## **Dual Enrollment**

Students may register for any course which is approved by the post secondary institution and the Waterloo Community School District. Students/families are responsible for tuition payment.

## **Scholarships**

Students interested in scholarships should be aware of the requirements early in their high school careers. Most applications must be completed early in the senior year. Schools maintain information about scholarship listings that all students may use.

West High: Scholarships are posted on the West High website under the Counseling Services tab

East High: <http://sites.google.com/waterlooschools.net/ehscounseling>

Expo: see your counselor

## **Entering College or University**

Students planning on entering either a college/university or technical school after graduation are advised to keep their scholastic record in excellent standing all four years for several reasons:

- Successful college work can ordinarily be done only by those who have learned to study.
- The junior year GPA is used when applying to schools.
- Colleges review student performance for ALL four years.
- Certain colleges will not admit students who are too low in academic standing.
- Scholarships and grants are available to those with excellent high school records.

## **Tips for Taking College-Level Courses in High School**

1. Before you take a college-level course, think about how it will affect your high school connections such as extra-curricular activities or a part-time job. You will want to have enough time for the course and the homework.
2. The grades you receive for these courses will not only be a part of your high school transcript but your college transcript as well.
3. Your high school and college academic calendars may be different. This means that even though you don't have to go to your high school classes, you may still have to go to your college classes.
4. If you have to pay for some of the classes, make sure you know all of the costs (such as tuition, fees, books, and supplies) ahead of time. You don't want to get into the class and then realize you don't have enough money to cover the expenses.
5. Make sure you set aside enough time for your college homework. You may get more than you are used to.
6. Find out how your college credits will transfer into your major at your next college or university.

For more information about taking college courses while in high school, contact your counselor.

Three common ways of earning college credit while in high school include, concurrent courses, post secondary education option courses and dual enrollment courses. **Remember you are starting a college transcript when you take these classes.**

## SPORTS and LEARNING

### NCAA Eligibility Center/Athletic Requirements

Students who plan to participate in Division I or II college athletics and/or accept an athletic scholarship must register with and be certified by the NCAA Initial-Eligibility Center. Students should register with the NCAA Eligibility Center at [www.ncaa.org](http://www.ncaa.org) following their junior year of high school. On the following pages, you will find the standards of course work and test scores to be declared eligible by the NCAA.

Eligibility Center procedures include very specific and detailed guidelines. It is very important that both athletes and parents understand these requirements. Planning for NCAA eligibility must start in the freshman year in order to insure that the required academic standards are met. It is the responsibility of the student to consult with their counselor, athletic director, and coach if they intend to apply for NCAA eligibility.

**Please remember to list the NCAA Eligibility Center to receive ACT or SAT scores.** This is done by listing 9999 as one of the colleges when registering for either the ACT or SAT.

Below is a list of the classes at each school that are currently approved by the Eligibility Center. Only those courses may be used to meet core and to figure core GPA. This list may change from year to year.

**NCAA has strict regulations regarding on-line learning. See your counselor before enrolling in any course using the district's on-line learning system.**

For more information go to  
[www.ncaaclearinghouse.net](http://www.ncaaclearinghouse.net)  
or  
[www.ncaa.org](http://www.ncaa.org)

### District Courses

#### English

Am Lit/Composition  
Am Literature/Adv  
American Masterpieces  
AP English Lang/Comp  
AP English Lit/Comp  
Composition/Adv  
Composition I & II  
Contemporary Literature  
Creative Writing  
English 9 & Adv  
English 10 & Adv  
Fund of Oral Comm  
IB Language & Lit HL  
Journalism  
Speech  
World Literature

#### Mathematics

Algebra I  
Algebra II  
Algebra I Part I & II  
AP Calculus  
Geometry  
IB Math SL  
IB Mathematics HL  
IB Mathematics SL  
Pre Calculus  
Trigonometry  
WCSD Pre-IB Algebra II  
WCSD Pre-IB Geometry

#### Science

Anatomy/Physiology  
Biology & Adv & AP  
Chemistry Adv & AP  
Earth & Space Science & Adv  
Ecology  
ELL Biology  
ELL Physical Science  
Geology  
IB Biology SL  
IB Chemistry HL & SL  
IB Sports Exercise & Health Sci  
Physical Science  
Physics  
WCSD Pre-IB Physics

#### Social Science

African American History  
Arab-Israeli Conflict  
Contemporary Affairs & Adv  
Economics  
Geography  
IB Economics HL & SL  
IB History HL  
International Relations  
Intro to Psychology  
Intro to Sociology  
Laws, Order & Society  
Psychology I: Perspectives in Psychology  
Psychology II: Disorders & Personality  
Sociology  
U.S. Government & AP  
U.S. History & Adv & AP  
Western Civ. I, III  
World History A/B & Adv

#### World Language

French I, II, III, IV  
German I, II, III, IV  
IB German SL  
IB Spanish SL  
Spanish I, II, III, IV

**NOTE: Courses may be added or deleted during the school year. Please check the latest HS Planning Guide on the WCSD website.**

## NCAA Academic-Eligibility Requirements

(source: [www.eligibilitycenter.org](http://www.eligibilitycenter.org))

If students want to participate in athletics or receive an athletic scholarship the first year, they must have graduated from high school and meet the following academic standards for either Division I or Division II. Note that only core courses that appear on the high school/district's list of NCAA courses on the NCAA Eligibility Center website are used to calculate core-course GPA.

### DIVISION I

#### On or After August 1, 2016

- Sixteen (16) core courses
- Ten (10) core courses completed before the seventh semester; seven (7) of the 10 must be in English, math or natural/physical science; these courses/grades are "locked in" at start of the seventh semester, which means they cannot be repeated for GPA improvement
- Must present a corresponding SAT or ACT test score and core-course GPA on the Sliding Scale B
- Earn a minimum GPA of 2.300
- GPA is calculated using the best 16 core courses that meet both progression (10 before seventh semester; 7 in English, math or science; "locked in") and subject-area requirements

#### Core Course Requirements – Division I

- 4 years English
- 3 years math (Algebra I or higher)
- 2 years natural/physical science (1 year of lab if offered)
- 1 year additional English, math or natural/physical science
- 2 years social science
- 4 years additional courses (any area above, foreign language or comparative religion/philosophy)

### DIVISION II

#### Before August 1, 2018

- Sixteen (16) core courses
- Minimum SAT score of 820 (critical reading and math sections) or ACT sum score of 68 (English, math, reading and science sections)
- Earn a minimum GPA of 2.000

#### On or After August 1, 2018

- Sixteen (16) core courses
- Must use the Division II Competition Sliding Scale to match test scores and core-course GPA (see [www.eligibilitycenter.org](http://www.eligibilitycenter.org))
- Earn a minimum GPA of 2.200

#### Core Course Requirements for Division II

- 3 years English
- 2 years math (Algebra I or higher)
- 2 years natural /physical science (1 year of lab if offered)
- 3 year additional English, math or natural/physical science
- 2 years social science
- 4 years additional courses (any area above, foreign language or comparative religion/philosophy)

### DIVISION III

Contact your Division III college regarding its policies on financial aid, practice and competition.

#### Sliding Scale B

Use for Division I beginning August 1, 2016

#### NCAA DIVISION I SLIDING SCALE

Core GPA	SAT Verbal and Math Only	ACT
3.550 & above	400	37
3.525	410	38
3.500	420	39
3.475	430	40
3.450	440	41
3.425	450	41
3.400	460	42
3.375	470	42
3.350	480	43
3.325	490	44
3.300	500	44
3.275	510	45
3.250	520	46
3.225	530	46
3.200	540	47
3.175	550	47
3.150	560	48
3.125	570	49
3.100	580	49
3.075	590	50
3.050	600	50
3.025	610	51
3.000	620	52
2.975	630	52
2.950	640	53
2.925	650	53
2.900	660	54
2.875	670	55
2.850	680	56
2.825	690	56
2.800	700	57
2.775	710	58
2.750	720	59
2.725	730	60
2.700	740	61
2.675	750	61
2.650	760	62
2.625	770	63
2.600	780	64
2.575	790	65
2.550	800	66
2.525	810	67
2.500	820	68
2.475	830	69
2.450	840	70
2.425	850	70
2.400	860	71
2.375	870	72
2.350	880	73
2.325	890	74
2.300	900	75
2.299	910	76
2.275	910	76
2.250	920	77

Core GPA	SAT Verbal and Math Only	ACT
2.225	930	78
2.200	940	79
2.175	950	80
2.150	960	81
2.125	970	82
2.100	980	83
2.075	990	84
2.050	1000	85
2.025	1010	86
2.000	1020	86



## Taking College Classes while in High School

Students can get a jump start on college and post high school training and earn college credits by taking Concurrent, PSEO or Dual Enrollment classes. Each Program is different and the chart explains the differences.

	Concurrent	PSEO (Post Secondary Education Option)	Dual Enrollment
<b>What is it?</b>	A concurrent course is a <u>college credit course offered by Hawkeye</u> at East or West, a Hawkeye outreach center or sometimes on the HCC campus. Many of the courses are taught by qualified high school teachers who serve as adjunct instructors for HCC. Expo students may take concurrent classes at East, West or at an HCC location depending on the needs of their schedule.	The Postsecondary Enrollment Options (PSEO) program allows eligible high school students to expand their academic course offerings by <u>taking college-level courses at a number of surrounding colleges</u> . These are courses not available at the high schools. PSEO courses are paid for by the Waterloo District.	High school students may <u>enroll independently in college-level courses</u> as a tuition-paying student. These courses are considered Dual Enrollment courses.
<b>Eligibility</b>	<p>Waterloo recommends concurrent classes for 11<sup>th</sup> and 12<sup>th</sup> graders. 9<sup>th</sup> and 10<sup>th</sup> graders will be scheduled for these classes in rare cases based on student need and demonstrated proficiencies.</p> <p>You must meet the following requirements to take a concurrent course:</p> <ul style="list-style-type: none"> <li>• Demonstrate proficiency in three academic areas: reading, math, and science. This is primarily determined by the Iowa Assessment.</li> <li>• Meet Hawkeye's course requirements for any course requiring prerequisites or placement scores.</li> </ul>	<p>PSEO courses are open to 11<sup>th</sup> and 12<sup>th</sup> grade students who have not met high school graduation requirements and 9<sup>th</sup> and 10<sup>th</sup> grade students identified as talented and gifted through our district. You must meet the college's entrance requirements for any course requiring prerequisites or placement scores.</p> <p>You must meet the following requirements to take a PSEO course:</p> <ul style="list-style-type: none"> <li>• Demonstrate proficiency in three academic areas: reading, math, and science. This is primarily determined by the Iowa Assessment.</li> <li>• Meet institution's course requirements for any course requiring prerequisites or placement scores</li> </ul> <p>You may not take a course which is "comparable" to a course at your high school. A "comparable" course is one offered by East, West or Expo. See your counselor for accepted courses.</p>	Dual Enrollment courses are open to 11 <sup>th</sup> and 12 <sup>th</sup> grade students who have not met high school graduation requirements and 9 <sup>th</sup> and 10 <sup>th</sup> grade students identified as talented and gifted through their local district. You must meet the college's requirements for any course requiring prerequisites or placement scores.
<b>Number of Courses</b>	You may take up to 23 credits at Hawkeye per academic year (Fall and Spring semesters).	You may take up to 23 credits per academic year (Fall and Spring semesters). Visit with your high school counselor for a list of available classes.	You may enroll in classes and become a part-time student. The number of courses you can take as a part-time student varies from one institution to another. Courses must be taken for college credit and you must meet the course requirements.
<b>Credits</b>	You will earn both high school credit and college credit for the courses taken. After successfully completing a course, it will be recorded on your high school and Hawkeye transcripts. If you are attending a college other than Hawkeye after graduation, contact that college to be sure your Hawkeye courses will transfer.	You will earn both high school credit and college credit for the courses taken. After successful completion of a class, it will be recorded on your high school and college transcripts.	You will earn college credit for the courses taken. You do not earn high school credit. After successful completion of a class, it will be recorded on your college transcript.
<b>Costs</b>	The district pays Hawkeye for the cost of tuition. Your high school may also provide textbooks for you to use during the class. You or your family will be responsible for the cost of transportation to and from class, field trips, and other out-of-class activities.	The district will pay for the cost of tuition, textbooks, materials, and fees. You or your family will be responsible for the cost of transportation to and from class, field trips, and other out-of-class activities. <u>If you do not pass a course, you or your family are responsible for all tuition and fees. (\$250)</u>	You or your family will be responsible for all costs. You are also responsible for providing transportation to and from the college.

	Concurrent	PSEO (Post Secondary Education Option)	Dual Enrollment
How to Enroll	<p><b><i>These courses have enrollment &amp; minimum test requirements which MUST be met before you can register.</i></b></p> <p>These steps must be completed before your high school classes begin.</p> <ol style="list-style-type: none"> <li>1. Schedule your required high school courses.</li> <li>2. Meet with your high school Counselor to determine which concurrent courses are available.</li> <li>3. Fill out an online registration form (that includes your Social Security Number) as directed by your counselor or HCC representative. Hawkeye does not allow you to register without the SS#.</li> <li>4. Take a copy of your Accuplacer or ACT scores to the HCC representative at your school.</li> <li>5. The HCC representative will determine if your scores qualify you to register.</li> </ol>	<p>These steps must be completed by May 15 for the Fall Semester and/or November 30 for the Spring Semester. Registrations submitted after that date will be approved on an individual basis.</p> <ol style="list-style-type: none"> <li>1. Schedule your required high school courses.</li> <li>2. Meet with your high school counselor to determine which college classes you can take.</li> <li>3. Complete the <u>PSEO enrollment form</u>.</li> <li>4. Waterloo Schools have their own PSEO registration forms and contracts.</li> <li>5. Have your school counselor and parent/guardian sign the form.</li> <li>6. Have your high school send your transcripts and your ACT scores.</li> </ol>	<p>These steps must be completed by May 15 for the Fall Semester and/or November 30 for the Spring Semester. Registrations submitted after that date will be approved on an individual basis.</p> <ol style="list-style-type: none"> <li>1. Schedule required high school courses.</li> <li>2. Meet with your counselor to select classes.</li> <li>3. Complete the <u>dual enrollment form</u>.</li> <li>4. Have your counselor and parent/guardian sign the form.</li> <li>5. Complete and meet all entrance requirements.</li> </ol>

# Building Your Future:

## Preparing for Academic Success at Iowa's Regent Universities

	<u>Minimum</u> Requirements for Admission			<u>Optimum</u> Recommendations for Success
	Iowa State University	The University of Iowa	University of Northern Iowa	
<b>English</b>	<b>4 years</b> emphasizing writing, speaking, and reading, as well as an understanding and appreciation of literature.	<b>4 years</b> with an emphasis on the analysis and interpretation of literature, composition, and speech.	<b>4 years</b> including one year of composition; may also include one year of speech, communication, or journalism.	<b>4 years</b> 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.
<b>Math</b>	<b>3 years</b> including one year each of algebra, geometry, and advanced algebra.	<b>3 years</b> including two years of algebra and one year of geometry for admission to the College of Liberal Arts and Sciences. <b>4 years</b> including two years of algebra, one year of geometry, and one year of higher math (trigonometry, analysis, or calculus) for admission to the College of Engineering.	<b>3 years</b> including the equivalent of algebra, geometry, and advanced algebra.	<b>4 years</b> , one in every year of high school. While advanced courses like calculus and statistics are good, it's more important that you gain a complete understanding of advanced algebra and trigonometry.
<b>Natural Science</b>	<b>3 years</b> including one year each from any two of the following: biology, chemistry, and physics.	<b>3 years</b> including courses in physical science, biology, chemistry, environmental science and physics for admission to the College of Liberal Arts and Sciences. <b>3 years</b> with at least one year each in chemistry and physics for admission to the College of Engineering. <b>3 years</b> including one year each of biology, chemistry and physics for admission to College of Nursing.	<b>3 years</b> including courses in general science, biology, chemistry, earth science, or physics. Laboratory experience is highly recommended.	<b>4 years</b> , one in each year of high school. To be really well prepared for college, 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 integrated fashion, depending on your school's offerings.
<b>Social Science</b>	<b>2 years</b> for admission to the Colleges of Agriculture, Business, Design, Engineering, and Human Sciences. <b>3 years</b> for admission to the College of Liberal Arts and Sciences.	<b>3 years</b> with U.S. history and world history recommended for admission to the College of Liberal Arts and Sciences. <b>2 years</b> with U.S. history and world history recommended for admission to the College of Engineering.	<b>3 years</b> including courses in anthropology, economics, geography, government, history, psychology, or sociology.	<b>3 years</b> are essential, but four are better. Take at least one year of U.S. history and one year of world history. Additional courses in anthropology, economics, political science, psychology, and sociology provide an important understanding of our political, social, and economic institutions.
<b>Foreign Language</b>	<b>2 years</b> of a single foreign language for admission to the College of Liberal Arts and Sciences and the College of Engineering.  Foreign language courses are not required for admission to the Colleges of Agriculture, Business, Design, or Human Sciences.	<b>2 years</b> of a single foreign language are required for admission. For many degrees, the fourth year of proficiency is required for graduation. <b>3 years</b> in a single language or two years each in two different languages for nursing.	Foreign language courses are not required for admission. However, two years of a foreign language in high school with a C- or above in the last term will meet the university graduation requirement.	<b>4 years</b> of a single foreign language. By taking foreign 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.
<b>Other Courses</b>	Specific elective courses are not required for admission.	Specific elective courses are not required.	<b>2 years</b> of additional courses from the required subject areas, foreign language, or fine arts.	<b>Explore!</b> Courses in fine arts, performing arts, computers, or technology will help round out your high school experience. Your future study or career may focus on one of those areas. Follow your interests, talents, and the strengths of your school. Remember to choose courses with high academic standards.

Source: <http://www.regents.iowa.gov/RAI/info.html#other>

Updated from website December 2016

# Regent Admission Index (RAI)

Students from Iowa high schools must have a Regent Admission Index score of at least 245 and take the minimum number of required high school courses to qualify for automatic admission to Iowa State University, the University of Northern Iowa, and the College of Liberal Arts and Sciences at The University of Iowa. Students who achieve a score of less than 245 will be considered for admission on an individual basis. There are two RAI formulas for computing students' RAI scores; the Primary RAI formula for students whose high schools provide class rank and the Alternative RAI formula for students whose high schools do not provide class rank. WCSD provides a class rank.

The index combines four factors that strongly predict success at regent universities:

- ACT or SAT test score
- high school rank
- high school cumulative grade-point average
- the number of completed high school core courses.

## Primary RAI Formula

$$RAI = (2 \times \text{ACT composite score}) + (1 \times \text{high school rank expressed as a percentile}) + (20 \times \text{high school grade point average}) + (5 \times \text{number of high school courses completed in the core subject areas})$$

It is recommended that students go to the *Regent Admission Index* website where there is a **CALCULATOR** in which students can insert their specific information regarding their ACT or SAT test scores, their high school rank, their cumulative grade-point average and the number of completed high school courses. The Index Calculator will automatically calculate the student's score for admission. In addition, there is additional information that further explains the Admission Index and how to use it, plus information about admissions in general.

[www.regents.iowa.gov/RAI/index.html](http://www.regents.iowa.gov/RAI/index.html)

## Figuring the Number of High School Courses

To figure the number of high school courses completed in the core subject areas, students will need to look at the School Codes for the Exchange of Data (SCED) course classification system numbers for the courses they've taken. The SCED number is made up of a series of digits and in the WCSD Program of Studies, each course has the SCED number listed in small print below the title of the course. Only the first 6 digits are necessary in determining eligible courses when using the RAI.

The first five digits of the SCED number are the *course description*. The first two digits in the *course description* represent the *subject area* and the next three digits identify the SCED *course title* within the *subject area*. The sixth digit represents the level of rigor of the course. Only those courses that are taught at **G** (general), **H** (honors), **E** (enriched or advanced), or **C** (concurrent enrollment courses, dual credit, and PSEO courses) rigor levels may be counted in the RAI calculation.

Below is an example of the SCED digits used for **English I** in this Program of Studies.

<u>Subject area</u>	<u>Course title</u>	<u>Rigor Level</u>
01	001	G

On the following page is a chart with the SCED Code Numbers for those eligible courses that can be used in the RAI.

## Acceptable Core Courses SCED Codes for Regent Admission Index (RAI)

In general, the courses that may be counted in the RAI calculation are limited to those offered in the following five subject areas: English, mathematics, science, social sciences, and foreign language. In addition, the regent universities recognize that the traditional measures of academic performance do not adequately describe some students' potential for success and there are other courses offered outside these five subject areas that may also serve as excellent preparation for college (e.g., animal science, Computer Science, journalism, etc.). While these courses are not eligible to be counted in the RAI calculation, each regent university will view these courses favorably when considering applicants who fall into the individual review category. The Regent universities strongly encourage all interested students to apply for admission. Applicants who feel their academic record is not an accurate reflection of their potential for success are encouraged to provide supplemental information explaining their circumstances in addition to the application, academic transcripts, and test scores.

### SCED Codes for Acceptable Core Courses

ENGLISH	SOCIAL SCIENCE
01001 - 01007	04001 - 04005
01051 - 01066	04051 - 04066
01101 - 01105	04101 - 04109
01151 - 01155	04151 - 04162
01201 - 01202	04165
11101	04201 - 04206
	04251
<b>MATHEMATICS</b>	04253 - 04262
02052	04301 - 04310
02054	07002 - 07004
02056 - 02057	
02061	
02072 - 02073	
02101 - 02113	
02121 - 02126	
02131 - 02134	
02141	
02149	
02201 - 02203	
<b>SCIENCE</b>	
03001 - 03009	
03051 - 03061	
03063	
03101 - 03104	
03106 - 03108	
03151 - 03152	
03155 - 03160	
03162 - 03166	
03201	
03207 - 03209	
21104	

FOREIGN LANGUAGE	
06101 - 06106	06489 - 06491
06109 - 06113	06501 - 06506
06121 - 06126	06509 - 06611
06129 - 06133	06521 - 06626
06141 - 06146	06529 - 06531
06149 - 06151	06581 - 06586
06161 - 06166	06589 - 06591
06169 - 06171	06601 - 06606
06181 - 06186	06609 - 06611
06189 - 06191	06641 - 06646
06201 - 06206	06649 - 06651
06209 - 06212	06661 - 06666
06241 - 06246	06669 - 06671
06249 - 06251	06681 - 06686
06261 - 06266	06689 - 06691
06269 - 06271	06701 - 06706
06281 - 06286	06709 - 06712
06289 - 06291	06721 - 06726
06301 - 06305	06729 - 06732
06311	06761 - 06766
06313	06769 - 06771
06321 - 06325	06781 - 06786
06331	06789 - 06791
06401 - 06406	06801 - 06805
06409 - 06411	06821 - 06826
06421 - 06426	06829 - 06831
06429 - 06431	06841 - 06846
06441 - 06446	06849 - 06851
06449 - 06451	06861 - 06866
06481 - 06486	06869 - 06871

Updated 1/5/16

Source: [www.regents.iowa.gov/RAI/index.html](http://www.regents.iowa.gov/RAI/index.html)

## **Performance Based Diploma Academy at East & West**

The mission of the PBD Academy is to remove any barrier to learning that might exist for a student so that they graduate ready for college, career and citizenship.



### **Program Description**

The Performance Based Diploma Academy provides a personalized learning environment and a comprehensive system of supports to remove barriers to learning and graduation. The PBD Academy provides an on-site alternative education program serving students for whom the traditional classroom setting and pacing are not a good fit. Students are recommended for the Academy by teachers and counselors. Four core teachers, a lead teacher/coordinator and a counselor facilitate self-paced, computer-assisted learning in English, math, science and social studies. Electives and career tech classes are taken in the traditional curriculum setting.

Students in the PBD Academy:

- spend their time taking courses in the four core academic areas, working with a counselor, meeting with community mentors, and receiving employability skill development while taking electives in career-oriented fields.
- are eligible to participate in all of the high school's activities and receive a standard Waterloo diploma upon completion of requirements.
- are considered to be East or West students and are subject to the rules and regulations of all students. Students and their parents sign a contract outlining specific requirements to remain in the academy. Students who are unsuccessful in this program will be scheduled into "regular" classes or may be transferred to a district alternative program.

### **PBD Academy Components**

#### **Academic**

Students take their core academic courses in a smaller focused environment, using the Edgenuity curriculum, which allows them to do most of their coursework on the computer working at their own pace. The Edgenuity courses are customized to be aligned with the Waterloo Community Schools' curriculum, so students learn the same material and concepts as peers in traditional classes. Students' transcripts will reflect the same course names as those in traditional classes. Career/technical and elective classes are taken outside the academy with the rest of the student body. **Students will receive the same Waterloo Community Schools Diploma.**

#### **PBD Academy Core Courses**

##### **English**

English 9, 10  
American Lit/Comp  
World Lit  
English 12

##### **Math**

Algebra I  
Geometry  
Algebra II  
Consumer Math

##### **Science**

Biology  
Chemistry  
Earth Science  
Physical Science  
Environmental Science  
Geology

##### **Social Science**

Economics  
U.S. History  
World History  
Government  
Contemporary Affairs

Other courses are also available depending on student need.

#### **Career**

Students will learn the importance of seeking careers that help them realize their life potential. Students will also take the Waterloo Schools' elective courses in their areas of career interests. The hope would be to have all students take advantage of one or more career pathway options at the Waterloo Career Center. Special attention is paid to the employability skills of the Iowa Core Curriculum.

#### **Counseling**

The PBD Academy is staffed with a full-time counselor who will meet with students regularly to discuss any issues which may affect their success. Goal setting/decision making and self-improvement skills will be emphasized. Guidance in students' selection of careers, academic progress and employability skills are highlighted.

#### **Mentoring**

Adult mentors are available to serve as positive role models. Students will work with their mentors while focusing on life management skills. Career interests of the student are matched to the career of the mentor. The team works with the counselor to ensure a good mentor/mentee relationship.

## Career Interest Academies at East and West

East and West High Schools are four-year comprehensive high schools educating more than 3000 students. The staffs are committed to continuous school improvement. Our mission is to ready students for college, career, and citizenship. This includes a vision of increased student academic achievement through proven research based instructional strategies. Waterloo has a strong base of classes including advanced placement courses, concurrent classes with Hawkeye Community College and post secondary education options.

2010-2011 began an exciting change in our high schools. East and West High Schools were organized into Career Interest Academies which are a type of a smaller learning community. Our smaller learning communities connect approximately 300 to 400 students within a career interest area. In addition, each high school has a Performance Based Diploma Academy for students who are at risk of not graduating. These students take their core classes in the PBD Academy and elective classes in a Career Interest Academy.

Career Interest Academies (CIAs) offer a number of benefits to our students:

- Students are a part of a smaller "school-within-a-school", so they will get to know their peers and teachers better and be part of the academy "family".
- Students continue to get a well-rounded education of general education courses while also learning more about their career interests.
- As the CIAs develop, more courses specifically related to each career pathway will be developed. We will offer job shadowing and internship opportunities for students in many areas. In addition, some traditional general education courses may take on a few new twists, adding some career-related activities while continuing the rigor and content needed for admission to college.
- Students will leave the Career Interest Academy more focused with the skills and knowledge to assist them in transitioning into college, other post-secondary education, or the workforce.
- Students may change their academy choice at the end of the year if their interests change.
- Students who are a part of the Performance Based Diploma Academy will take their electives in one of the Career Interest Academies.
- They set, promote and support high standards for student academic performance while developing students' talents and abilities necessary to pursue a postsecondary education and/or employment.
- Students choose a major area of interest that will allow them to explore an area that they might be interested in as a career or that they would just like to learn more about. Choosing a career interest area increases the relevance of the high school experience.
- Students develop long range education plans with the adults in their academy.

The schools have been organized into the Career Interest Academies listed below:

### **East High School**

1. Arts, Communication and Business
2. Engineering, Technology, and Manufacturing
3. Health and Human Services

### **West High School**

1. Arts, Communication and Business
2. Engineering, Technology and Manufacturing
3. Health Services
4. Human Services

# Waterloo Career Center

*All courses taught at the Waterloo Career Center are 90 minutes in length*

	Course Title	9	10	11	12		Credits	Recommended Prerequisite
	<b>Advanced Manufacturing</b>							
IND346	Basic Design and Modeling (Qtr 1/3)		X	X	X		1	
IND314	Machine Trade Print Reading I * (Qtr 2/4)		X	X	X		1	
IND347	Molten Metal Technology		X	X	X		2	
IND348	CNC Fundamentals * (MWF w/BMT)		X	X	X		1	
IND349	Basic Machine Theory * (TR w/CNC)		X	X	X		1	
	<b>Digital Graphics</b>							
ART205	Drawing and Composition *		X	X	X		2	
COM220	Desktop Publishing *		X	X	X		2	
COM221	Basic Digital Photography *		X	X	X		2	
COM222	Design and Layout *		X	X	X		2	Yes
COM223	Graphic Imaging * (MWF w/EDGW)		X	X	X		2	Yes
ENG408	English in a Digital Graphic World (TR w/GI)		X	X	X		1	
ART312	Print Media		X	X	X		2	Yes
ART314	Portfolio/Internship Co-op			X	X		2	
	Graphic Design Internship							
	<b>Early Childhood Education (@Elk Run)</b>							
FCS415	Intro to Early Childhood Ed * (Qtr 1/3)		X	X	X		1	
FCS417	Early Childhood Curriculum I * (Qtr 2/4)		X	X	X		1	
FCS222	Exploring Early Childhood		X	X	X		2	
FCS419	Child Health, Safety, and Nutrition * (MWF)		X	X	X		1	
ENG310	Children's Literature (TR)		X	X	X		1	
CAR330	Multicultural Practices in the Classroom			X	X		2	
FCS421	Early Childhood Guidance *		X	X	X		2	
	<b>Health Science</b>							
CAR328	Medical Terminology * (MWF)			X	X		1	Yes
CAR322	Intro to Health Professions * (TR)			X	X		1	Yes
CAR323	Nursing Assistant *			X	X		2	Yes
	<b>Information Technology</b>							
COM225	Intro to Data Base * (MWF)		X	X	X		1	
COM218	Database and Spreadsheets * (TR)		X	X	X		1	Yes
CAR310	A+ Certification Prep *		X	X	X		2	
CAR464	Cisco Networking *			X	X		2	Yes

\* Concurrent courses with Hawkeye Community College must meet entrance requirements.



## Advanced Manufacturing

### **Basic Design and Modeling** (Qtr 1/3) **IND346**

21-005-G-050-00

Open to 10-11-12 1 credit

This course provides students an introduction to engineering and advanced manufacturing. Students will expand their knowledge of the following concepts: modeling systems, design, and technology. In addition students will explore the following topics: engineering design principles, material science, research and development process, and manufacturing techniques and systems. (90 minute class period)

### **Machine Trade Printreading I** (Qtr 2/4) **IND314**

20-108-C-050-00

Open to 10-11-12 1 credit

Hawkeye Community College MFG122 3 credits

This course provides the student with the necessary knowledge to read and interpret basic prints used in the machining industry. It covers terminology, line-types, and drawing interpretation. First and third angle orthographic projection, dimensioning methods, and tolerancing are the major topics covered. (90 minute class period)

### **Molten Metal Technology** **IND347**

13-201-G-100-00

Open to 10-11-12 2 credits

This class will build upon student knowledge from the Intro to Metals in Manufacturing class. Students will increase their knowledge and skill in both flame and arc welding. In addition, students will build upon foundational knowledge of the process of designing patterns, the use of gating systems and the entire metal casting process. This class is where students can take their product ideas and concepts and begin the process of creation through metal works technology. (90 minute class period)

### **CNC Fundamentals** (MWF w/BMT) **IND348**

21-010-C-050-00

Open to 10-11-12 1 credit

Hawkeye Community College MFG302 3 credits

This course covers computer numerical control (CNC) as it relates to milling machines, lathes, and related software. Emphasis is on machine set-up and operation, inspection of parts, and communication of peripherals. (90 minute class period)

### **Basic Machine Theory** (TR w/CNC) **IND349**

13-203-C-050-00

Open to 10-11-12 1 credit

Hawkeye Community College MFG211 2 credits

This course presents basic machining processes and concepts necessary to set-up and operate machine shop equipment. (90 minute class period)

## Digital Graphics

### **Drawing and Composition**

**ART205**

05-199-C-050-00

Open to 10-11-12 2 credits

Hawkeye Community College GRA105 4 credits

This course is a comprehensive drawing class that builds upon student's initial knowledge and experience from previous art classes. This class strengthens the students' abilities by the drawing of basic shapes, studying perspective rendering, and creating full studies of the human head, face and overall form. Students strengthen their use of structural and compositional theories such as unity, balance, and symmetry. Color theory is thoroughly explored and students use both wet and dry media to further advance their creative and technical skills. (90 minute class period)

### **Desktop Publishing**

**COM220**

11-152-C-050-00

Open to 11-12 2 credits

Hawkeye Community College GRA133 4 credits

This course is a student's first step through the Graphic Design academy combining hands-on art making skills with computer based design technology. Adobe In-Design is introduced and the primary software for class projects and coursework. Students begin using graphic design systems as a tool to further their artistic growth. Challenges and concepts specific to the graphic design industry such as the combination of text and images, lettering exploration and visual layout are studied and are the basis for all projects. The class concludes with the student's participating in the ACE (Adobe Certified Expert) examination for In-Design to achieve Professional Certification. (90 minute class period)

### **Basic Digital Photography**

**COM221**

11-054-C-050-00

Open to 10-11-12 2 credits

Hawkeye Community College MMS103 3 credits

This course explores the use of digital photography and imaging systems to heighten and expand student's creative talent. Adobe Photoshop is introduced and is the primary software utilized in this class. Digital camera components, photographic concepts and visual design processes are studied in-depth. The class presents students with assignments that directly relate to real-world graphic design and photographic challenges and projects. (90 minute class period)

### **Design and Layout**

**COM222**

12-005-C-050-00

Open to 10-11-12 2 credits

Hawkeye Community College GRA196 4 credits

*Prerequisite: Desktop Publishing*

This course continues the student's study of print media design, layout, and the artful integration of images and text. Students continue to expand their practice of creating designs, utilizing technology and producing actual products thereby bringing their ideas to life. Adobe Illustrator is introduced and is the primary software utilized in this class. Projects center on actual tasks performed by professional designers in the graphic industry including: advertising and page layout, poster design, marketing campaigns, graphics for apparel and package design. The class concludes with the student taking the ACE (Adobe Certified Expert) examination in Adobe Illustrator for Professional Certification. (90 minute class period)

<b>Graphic Imaging (MWF w/EDGW)</b>	<b>COM223</b>
11-054-C-050-00	
Open to 10-11-12	2 credits
Hawkeye Community College GRA142	4 credits
<i>Prerequisites: Desktop Publishing</i>	
This course involves in-depth uses of Adobe Illustrator and Adobe Photoshop. Students further their experience from previous classes and apply their skills to more advanced features of imaging software and challenging projects. Students work on combining original artwork with images and graphics generated with advanced imaging software. The course focus is to evolve student's ideas to marketable products, layouts and graphic visual plans. The class concludes with the student taking the ACE (Adobe Certified Expert) examination in Adobe Illustrator for Professional Certification. (90 minute class period)	
<b>English in a Digital Graphic World (TR w/DL)</b>	<b>ENG408</b>
01-065-G-050-00	
Open to 10-11-12	1 credit
This course will engage students in developing language arts critical thinking skills and knowledge through analyzing selected literature, applying writing techniques, and exploring additional literacy skills. Students will investigate the career world of digital graphics through units that include technical writing, graphic short stories, proposal creation, visual literacy, business writing and others. The learning focus uses a hands-on activity based approach that challenges students to apply literacy skills in a digital graphics career oriented course. (90 minute class period)	

<b>Print Media</b>	<b>ART312</b>
05-162-G-050-40	
Open to 10-11-12	2 credits
<i>Recommended: Two Digital Graphic courses</i>	
This course is an advanced Multi-Media class exploring previously developed graphic design skills and utilizing equipment at the Waterloo Career Center. Students will design, develop and create products aligned with merchandise found within the Graphic Design Industry (such as: package design, posters, advertisements, signage, T-shirt and apparel design). This course may offer students the opportunity to work in an industry related internship to increase their professional experience. (90 minute class period)	

<b>Portfolio/Internship Co-op</b>	<b>ART314</b>
05-198-G-050-00	
Open to 11-12	2 credits
This course serves as the concluding element in the Digital Graphic Pathway. Students will finalize their physical and digital portfolio, resume, and other tools for acquiring positions in the workplace, trade school or college. Students may have an opportunity to be placed with a local internship program to gain professional experience. Students will also be working on projects for area businesses, school and community organizations.	

<b>Graphic Design Internship</b>	<b>ART</b>
05-198-G-050-04	
Open to 12	1 credit
Seniors in the Arts and Communication Pathway have the opportunity to work with a professional in their desired profession. Interns spend 8 to 20 hours a week at their internship site completing work assignments, attending meetings, and developing special projects requested by the sponsor. The intern has the opportunity to make contributions to the organization while achieving personal, academic, and career growth. Interns can schedule classes and still participate in an internship experience on a part-time basis. Interns spend the first three weeks of the semester attending classes as part of the internship. Once students begin their internship, they meet once a week to share and reflect on their experiences. Curriculum for the seminars includes career development, communication skills, problem solving, leadership, and decision-making skills integrated with technology. Interns participate in self-assessments and pursue personalized learning plans. Technology is used to assist students in creating polished presentations and the computer lab is utilized for all assignments.	

## Early Childhood Education

<b>Introduction to Early Childhood Education(Q1/3)</b>	<b>FCS415</b>
19-153-C-050-10	
Open to 10-11-12	1 credit
Hawkeye Community College ECE103	3 credits
This course gives students a historical and philosophical foundation of the field of early childhood education. Includes an overview of assessment and trends that influence best practices. Explores careers in the field. Addresses influences of families and diversity. (90 minute class period)	
<b>Early Childhood Curriculum (Qtr 2/4)</b>	<b>FCS417</b>
19-153-C-050-20	
Open to 10-11-12	1 credit
Hawkeye Community College ECE158	3 credits
This course focuses on the development, implementation and assessment of appropriate environments and curricula for young children ages three through eight. Students prepare to utilize developmentally appropriate practices in a context of family and culturally sensitive care. Emphasis is on understanding children's development stages and developing appropriate learning opportunities, interactions and environments in the following areas: dramatic play, art, music, fine and gross motor play. (90 minute class period)	

<b>Exploring Early Childhood</b>	<b>FCS222</b>
19-153-G-050-00	
Open to 10-11-12	2 credits
Students will study the four areas of development: social, emotional, intellectual and physical in each age group of children from birth to age 6. This class is designed for students interested in working with children in child related fields such as: preschool or kindergarten, nursing, daycare or parenting. Students will be engaged in a Pre-K classroom for observation. The student will be able to then complete a written reflection of the observation. (90 minute class period)	

**Child Health, Safety, and Nutrition (MWF w/CL) FCS419**

19-151-C-050-00

Open to 11-12

1 credit

Hawkeye Community College ECE133

3 credits

This course focuses on current concepts in the fields of health, safety and nutrition and their relationship to the growth and development of the young child ages birth to eight. Blends current theory with practical applications and assessments. Includes the influences of families and diversity on health, safety, and nutrition in early childhood settings. (90 minute class period)

**Children's Literature (TR w/CHSN)****ENG310**

01-065-G-050-00

Open to 11-12

1 credit

This course is designed for those interested in literacy and/or working with youth. It promotes the selection and evaluation of literature for children and the engagement of young readers in a variety of literary genres. The course will emphasize literature as a key element of the reading curriculum, pre-school through twelfth grade. The course will be relevant to those interested in education and literacy. (90 minute class period)

**Multicultural Practices in the Classroom****CAR 330**

19-154-G-050-00

Open to 11-12

2 credits

This course explores views of different ethnic groups regarding early childhood through early adulthood, child-rearing practices, and the students role in society. It will also focus on developing a multicultural curriculum to incorporate individually based developmental and culturally appropriate practices and provides opportunities to design multicultural materials to address cognition, socialization, language and small and large motor development. (90 minute class period)

**Early Childhood Guidance****FCS421**

19-153-C-050-30

Open to 10-11-12

2 credits

Hawkeye Community College ECE243

3 credits

This course focuses on effective approaches and positive guidance strategies for supporting the development of all children. Emphasizes supportive interactions and developmentally appropriate environments. Uses assessment to analyze and guide behaviors. Studies impact of families and diversity on child guidance. (90 minute class period)

## Health Science

**Medical Terminology (MWF w/IHP)****CAR328**

14-154-C-050-00

Open to 11-12

1 credit

Hawkeye Community College HSC113

2 credits

*Prerequisite: Parental and coordinator approval and C or higher grade in Biology. The class may be offered on HCC campus or at the Career Center campus.*

*Transportation is the responsibility of the student/parent if taken on HCC campus.*

This course presents the foundation necessary to develop a basic medical terminology vocabulary. Emphasis on the components of terms as related to each body system will be provided. The course further provides the student with the opportunity to properly spell, pronounce, and utilize medical terms. The utilization of a medical dictionary will also be a focus. (90 minute class period)

**Intro to Health Professions (TR w/MT)****CAR322**

14-001-C-050-00

Open to 11-12

1 credit

Hawkeye Community College HSC108

2 credits

*Prerequisite: Instructor, parental and coordinator approvals, and C or higher grade in Biology. The class may be offered on HCC campus or at the Career Center campus.*

*Transportation is the responsibility of the student/parent if taken on HCC campus.*

This course introduces the student to the health care system and provides an opportunity to explore a wide variety of health careers/professions. Students will explore ethical and legal responsibilities within the healthcare system including expectations for professional behavior. This course will allow for certification in common healthcare requirements. (90 minute class period)

**Nursing Assistant****CAR323**

14-051-C-050-00

Open to 11-12

2 credits

Hawkeye Community College PNN100

3 credits

*Prerequisite: Instructor, parental and coordinator approvals, and C or higher grade in Biology. The class may be offered on HCC campus or at the Career Center campus.*

*Transportation is the responsibility of the student/parent if taken on HCC campus.*

This course is designed to meet the training requirements of the Omnibus Reconciliation Act (OBRA) for aides working in nursing facilities (NF) and skilled nursing facilities (SNF). Emphasis in the course is on students achieving a basic level of knowledge and demonstrating skills to provide safe, effective resident/client care. This course includes laboratory and clinical work at a local nursing care facility. The career exploration experience components will include community service/volunteer work, obtaining continuing education units through professional development opportunities and/or done individually at a nursing care facility for pass/fail credit only. (90 minute class period)

Content: 90 hours (32 hours classroom instruction, 16 hours laboratory, 32 hours clinical and 10 hours of volunteer career exploration experiences)

Course units:

Introduction to the Role of the Nurse Aide

The Working Environment

Personal Care of the Resident/Client

Nutrition

Routine Care Procedures

Residents/Clients with Specialized Problems

# Information Technology

## **Introduction to Data Base** (MWF) **COM225**

10-052-C-050-00

Open to 10-11-12 1 credit

Hawkeye Community College CIS303 3 credits

This course will introduce students to data management using databases. Focus will be given to database models, data storage concepts, SQL and data warehousing. (90 minute class period)

## **Database and Spreadsheets** (TR) **COM218**

10-005-C-050-00

Open to 10-11-12 1 credit

Hawkeye Community College BCA205 3 credits

*Prerequisite: Ability to type 15 net WPM on a five-minute timing.*

This course emphasizes file management and learning to generate and format spreadsheets and databases. File management tasks include managing folders and moving, copying and deleting files. Spreadsheet tasks include making entries, correcting entries, entering formulas and creating charts. Database tasks include designing and creating tables, generating queries, creating forms and reports, and database maintenance. Basic computer literacy is expected of students enrolling in this course. (90 minute class period)

## **A\* Certification Prep** **CAR310**

10-254-C-050-00

Open to 11-12 2 credits

Hawkeye Community College NET109 4 credits

This course will teach basic knowledge of desktop and laptop operating systems. This course will teach the important knowledge and skills necessary to competently install, build, configure, upgrade, troubleshoot, and repair personal computer compatible hardware including troubleshooting basic network and internet connectivity, dial-up, DSL, and cable. Additionally this course will also cover the latest memory, bus, peripherals, and wireless technologies. (90 minute class period)

## **CISCO Networking** **CAR464**

10-103-C-050-00

Open to 11-12 2 credits

Hawkeye Community College NET213 4 credits

*Prerequisite: Students must take the math section of the Accuplacer test and score at least a 59*

This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. It uses the OSI and TCP layered models to examine the nature and roles of protocols and services at the application, network, data link, and physical layers. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. Labs use a model Internet to allow students to analyze real data without affecting production networks. Packet Tracer (PT) activities help students analyze protocol and network operation and build small networks in a simulated environment. At the end of the course, students build simple LAN topologies by applying basic principles of cabling, performing basic configurations of network devices such as routers and switches, and implementing IP addressing schemes. (90 minute class period)



## Center for Advanced Professional Studies (CAPS)

### CAPS Engineering

21-048-C-050-00

Open to 11-12

HCC Special Topics in Engineering EGR945

The Center for Advanced Professional Studies (CAPS) Engineering course is for students who are interested in a combination of rigorous science and engineering fundamentals, entrepreneurship, and innovation. Students use technical knowledge to create solutions to world problems. The class will include a broad introduction to industry-based engineering, with a focus on college and career readiness and employability skills. Students will also learn the essential components of Engineering including design processes. All students will have hands-on, active learning opportunities with a full immersion in real-world projects developed in conjunction with local business partners. **This course will be a 3-period block**, with instruction taking place at a local business. Successful completion of this course will also earn students 5 college credits from Hawkeye Community College.

**CAP500**

3 credits

5 credits

### CAPS Communication and Design

11-048-C-050-00

Open to 11-12

HCC Special Topics in Marketing & Advertising

The Center for Advanced Professional Studies (CAPS) Communication Design course is for students who are interested in a combination of digital design, multi-media production as well as marketing and advertising strategies. Associates will be encouraged to develop entrepreneurial skill-sets and innovative processes. Course projects will provide creative services and deliverables to business clients, while developing personal business portfolios. Associates will collaborate with mentors and business partners in a real business environment away from the school campus.

**CAP505**

3 credits

3 credits

### CAPS Education

19-151-C-050-00

Open to 11-12

HCC Special Topics in Education

(EDU214 Exploring PK-12 Teaching (2 credits) and EDU901 Academic Service Learning Experience (1 credit))

The Center for Advanced Professional Studies (CAPS) Education Experience is for students who are interested in exploring teacher education as a profession. CAPS Education is a hands-on learning opportunity to explore the teaching profession, develop insight and knowledge of the field of K-12 education, and experience first-hand what a teacher's day-to-day work involves. Students will be placed in classrooms throughout the school district to observe and work with students in a variety of capacities.

**CAP506**

3 credits

3 credits

**Students enrolled in the Cedar Falls High School CAPS program will take their semester class at a designated Cedar Falls business partner and be taught by a Cedar Falls High School Instructor.**

**Center for Advanced Professional Studies (CAPS) students will receive Hawkeye Community College elective credit. Junior and Senior level students taking the CAPS program will engage in a unique learning opportunity to explore their interested in a profession-based learning approve. The program is designed to be student driven with teachers as facilitators while working on industry problem-based projects with Cedar Valley employers.**

## International Baccalaureate Diploma Program

The International Baccalaureate Diploma Program (IB DP) is a rigorous course of studies, utilizing international standards, based on an integrated curriculum infused with globalism. The IB DP was designed to provide students from all countries an education credential that could be recognized by universities around the globe. Schools that adopt International Baccalaureate are public, private, magnet, comprehensive, international, or redesigned. The Waterloo Community School District has made the IB DP available to all interested and prepared students.

The International Baccalaureate Diploma Program is a full course curriculum leading to examinations, in six academic areas, which meet the needs of highly motivated secondary school students. The IB DP applies a comprehensive curriculum that allows its graduates to fulfill requirements of various national education systems.

### Courses offered

Students will select three higher level (HL) and three standard level (SL) courses to complete during their junior and senior years. All WCSD pre-IB and IB courses are included in the Program of Study. Current IB offerings include twelve courses from six subjects:

#### Group 1 Subjects:

##### Language A - Studies in Language and Literature

IB Language & Literature English HL

#### Group 2 Subjects:

##### Language B – Language Acquisition

IB Language B: Spanish SL

IB Language B: German SL

#### Group 3 Subjects:

##### Individuals and Societies

History HL

Economics SL

Economics HL

#### Group 4 Subjects:

##### Experimental Sciences

Biology SL

Chemistry SL

Chemistry HL

Sports, Exercise & Health Science SL

#### Group 5 Subjects:

##### Mathematics

Math Studies SL

Math SL

Math HL

#### Group 6 Subjects:

##### The Arts

Visual Arts HL

Theater Arts HL



Full IB Diploma students must study one course from groups 1, 2 and 5. In addition, students must select three courses from the remaining groups with either an Arts course or electives from groups 3 and 4. In addition, all diploma candidates must fulfill three central requirements:

1. Theory of Knowledge, an externally assessed course that contrasts ways of knowing in all six subjects;
2. Extended Essay, an externally assessed, independent research project of 4,000 words in one of the subject areas;
3. Creativity, Action, Service (CAS) to develop the entire self through community service, artistic, and physical activities.

IB assessments are scored on a 1-7 scale, with an additional three points available for exemplary work on Theory of Knowledge and the Extended Essay. To earn an IB Diploma, a student must achieve a minimum total score of 24 without failing any courses.

All IB DP students will receive a WCSD diploma and recognition during the graduation ceremony in May. Scores are returned July 5<sup>th</sup> and will be available to access at that time. Student scores, within each subject, are recognized at universities in over 102 countries. IB courses and exams are recognized for the purpose of advanced credit and/or placement at over 900 North American colleges and universities.

### How to enroll

Interested students must meet with the IB counselor at their high school to schedule WCSD pre-IB courses. Students are expected to enroll in pre-IB courses and receive a passing grade to be prepared for the rigor of the IB courses offered in 11<sup>th</sup> and 12<sup>th</sup> grade. In addition, interested students must fill out an IB DP application which can be found on the WCSD website, as well as East and West High School websites. All IB Diploma candidates will have their exams paid for by the Waterloo Community School District.



**Note:** All of the courses listed below are at an accelerated pace and the coursework demonstrates elevated rigor. These courses should be taken by students pursuing the International Baccalaureate Diploma.

	Course Title	9	10	11	12		Credits	Recommended Prerequisite
	<b>ART</b>							
ART360/361 ART460/461	IB Visual Arts HL A/B			X	X		2	Yes
	<b>ENGLISH</b>							
ENG362/363 ENG462/463	IB Theatre Arts SL/HL A/B			X	X		2	Yes
ENG360/361 ENG460/461	IB Language & Literature English HL A/B			X	X		2	Yes
	<b>MATHEMATICS</b>							
MAT362/363 MAT462/463	IB Math Studies SL A/B			X	X		2	Yes
MAT364/365 MAT464/465	IB Math SL A/B			X	X		2	Yes
MAT368/369 MAT468/469	IB Mathematics HL A/B			X	X		2	Yes
	<b>SCIENCE</b>							
SCI360/361 SCI460/461	IB Biology SL			X	X		2	Yes
SCI362/363 SCI462/463	IB Chemistry SL A/B			X	X		2	Yes
SCI364/365 SCI464/465	IB Chemistry HL A/B			X	X		2	Yes
SCI466/467 SCI468/469	IB Sports, Exercise and Health Science SL A/B			X	X		2	Yes
	<b>SOCIAL SCIENCES</b>							
SOC370/371 SOC372/373	IB History HL A/B			X	X		2	Yes
SOC376/377 SOC476/477	IB Economics SL A/B			X	X		2	Yes
SOC378/379 SOC478/479	IB Economics HL A/B			X	X		2	Yes
SOC380/381 SOC480/481	IB Theory of Knowledge			X	X		1	Yes
	<b>WORLD LANGUAGES</b>							
FOR362/363 FOR462/463	IB Spanish SL A/B			X	X		2	Yes
FOR310/311 FOR410/411	IB German SL A/B			X	X		2	Yes

**IB Visual Arts HL A/B**

05-173-H-050-11 (11A)  
 05-173-H-050-21 (11B)  
 05-173-H-050-12 (12A)  
 05-173-H-050-22 (12B)

**ART360/361****ART460/461**

Open to 11-12

2 credits

*Recommended: Fundamentals of Art & Design and Teacher Approval*

IB Art Design HL is a two-year, accelerated course that requires students to complete studio work plus research workbooks. The course is designed for students specializing in the visual arts with creative and imaginative abilities and who may pursue the visual arts at a college or university. Students are required to commit time outside of school to both their research workbooks and studio projects. Junior to senior year, students will be required to complete works for their portfolios, which are individually theme related. The course culminates with a senior gallery night to display student work at the end of the two years.

**IB Theatre Arts SL/HL A/B**

05-062-H-050-11 (11A)  
 05-062-H-050-21 (11B)  
 05-062-H-050-12 (12A)  
 05-062-H-050-22 (12B)

**ENG362/363****ENG462/463**

Open to 11-12

2 credits

*Recommended: Adv Theatre Arts, Teacher approval*

IB Theatre Arts HL will focus on three core syllabus areas: theatre in context, theatre processes, and presenting theatre. In the first year, students will engage in instructional activities that hone skills relevant to theatre arts. In the second year, students complete four major assessments: a research presentation, a director's notebook, a collaborative project and a solo theatre piece. By creating, designing, directing and performing theatre based on theatre contexts and theatre processes, students will experience the international and intercultural dynamic that inspires and sustains the world of theatre arts.

**IB Language & Literature English HL A/B**

01-007-H-050-11 (11A)  
 01-007-H-050-21 (11B)  
 01-007-H-050-12 (12A)  
 01-007-H-050-22 (12B)

**ENG360/361****ENG460/461**

Open to 11-12

2 credits

*Recommended: WCSD Pre-IB Adv English/Am Lit*

IB Language A: Language and Literature-HL is a two year course emphasizing the study of language and literary analysis. Students will perform both written and oral assessments (internally graded by the teacher and externally graded by an IB examiner). Students will analyze, synthesize, and evaluate nonfiction, drama, poetry, novels, and other prose in American and world literature. The course will also emphasize thematic and philosophical connections as well as differences in literary periods, styles, and contexts. This course will make use of more mature materials that will allow students to see a wider view of the world.

**IB Math Studies SL A/B**

02-131-H-050-11 (11A)  
 02-131-H-050-21 (11B)  
 02-131-H-050-12 (12A)  
 02-131-H-050-22 (12B)

**MAT362/363****MAT462/463**

Open to 11-12

2 credits

*Recommended: WCSD Pre-IB Algebra II*

IB Math Studies is a two-year course. Topics of study include fundamental algebra, sets & logic, geometry and trigonometry, statistics & probability, functions, and financial mathematics.

**IB Math SL A/B**

02-132-H-050-11 (11A)  
 02-132-H-050-21 (11B)  
 02-132-H-050-12 (12A)  
 02-132-H-050-22 (12B)

**MAT364/365****MAT464/465**

Open to 11-12

2 credits

*Recommended: WCSD Pre-IB Algebra II, Pre-Calculus*

IB Math SL is a two-year course with pre-calculus being the first year. Topics of study include fundamental algebra, functions, trigonometry, vector geometry, matrices & transformations, statistics & probability, and calculus.

**IB Mathematics HL A/B**

02-131-H-050-11 (11A)  
 02-131-H-050-21 (11B)  
 02-131-H-050-12 (12A)  
 02-131-H-050-22 (12B)

**MAT368/369****MAT468/469**

Open to 11-12

2 credits

*Recommended: WCSD Pre-IB Algebra II, Pre-Calculus, AP Calculus*

IB Math HL is a two-year course for students wanting a rigorous college level math course. Ideally the student should enter the course having already completed Pre-Calculus during their sophomore year. Students will complete the core course which includes: Algebra, Functions and Equations, Circular functions and trigonometry, Vectors, Statistics and Probability, and Calculus. In addition to the core concepts the students will study advanced topics in Calculus (curriculum normally seen in Calculus II in college), Probability and Statistics, Sets and relations, as well as Discrete Mathematics.

**IB Biology SL A/B**

03-057-H-050-11 (11A)  
 03-057-H-050-21 (11B)  
 03-057-H-050-12 (11A)  
 03-057-H-050-22 (11B)

**SCI360/361****SCI460/461**

Open to 11-12

2 credits

*Recommended: WCSD Pre-IB Biology*

IB Biology SL is a two-year laboratory course covering all topics considered appropriate for an introductory college biology course. The principles of biology, such as evolution, ecology, cellular structure and function, molecular biology and genetics are covered extensively. Laboratory experimentation will be extensive and include the mathematical analysis of data and writing of lab reports. The student must be highly self-motivated and possess higher order thinking skills. Adequate preparation in mathematics and writing skills are essential for success in this course.



**IB Chemistry SL A/B**

03-107-H-050-11 (11A)  
 03-107-H-050-21 (11B)  
 03-107-H-050-12 (12A)  
 03-107-H-050-22 (12B)

**SCI362/363****SCI462/463****IB Chemistry HL A/B**

03-107-H-050-11 (11A)  
 03-107-H-050-21 (11B)  
 03-107-H-050-12 (12A)  
 03-107-H-050-22 (12B)

**SCI364/365****SCI464/465**

Open to 11-12 2 credits  
*Recommended: WCSD Pre-IB Chemistry, WCSD Pre-IB Biology, WCSD Pre-IB Algebra II*

IB Chemistry SL and HL are two-year laboratory courses that cover all topics considered appropriate for an introductory college chemistry course. The principles of chemistry, such as structure, states of matter, thermo chemistry, reactions and descriptive chemistry are covered in detail. Laboratory experimentation will be extensive and will require a significant time commitment by the student. The student must be highly self-motivated and possess higher order thinking skills. Adequate preparation in mathematics is essential for success in this course.

**IB Sports, Exercise and Health Science SL A/B**

03-065-H-050-11 (11A)  
 03-065-H-050-21 (11B)  
 03-065-H-050-12 (12A)  
 03-065-H-050-22 (12B)

**SCI466/467****SCI468/469**

Open to 11-12 2 credits  
*Recommended: WCSD Pre-IB Biology, Chemistry*

The IB DP course in sports, exercise and health science standard level (SL) involves the study of the science that underpins physical performance. The course incorporates the traditional disciplines of anatomy and physiology, biomechanics, psychology and nutrition. Students cover a range of topics and carry out practical (experimental) investigations in both laboratory and field settings. This provides an opportunity to acquire the knowledge and understanding necessary to apply scientific principals and critically analyze human performance.

**IB History HL A/B**

04-054-H-050-11 (11A)  
 04-054-H-050-21 (11B)  
 04-054-H-050-12 (12A)  
 04-054-H-050-22 (12B)

**SOC370/371****SOC372/373**

Open to 11-12 2 credits

*Recommended: WCSD Pre-IB World History*

IB History HL is a two-year course designed to further develop students' source evaluation and historical essay writing skills. The course will focus on evaluating international intervention and conflicts, governments under single parties, as well as the causes and effects of wars. Students will also complete an essay over an historical topic of their choice.

**IB Economics SL A/B**

04-206-H-050-11 (11A)  
 04-206-H-050-21 (11B)  
 04-206-H-050-12 (12A)  
 04-206-H-050-22 (12B)

**SOC376/377****SOC476/477****IB Economics HL A/B**

04-206-H-050-11 (11A)  
 04-206-H-050-21 (11B)  
 04-206-H-050-12 (12A)  
 04-206-H-050-22 (12B)

**SOC378/379****SOC478/479**

Open to 11-12 2 credits

IB Economics can be taken at either the Standard or Higher level. SL can be taken over the course of one year whereas HL is a two-year course. The courses will provide students with the basic tools of economic reasoning while teaching them to use those tools to explain or interpret economic problems and to evaluate policy solutions. Course content will include microeconomics, macroeconomics, international economics and development economics.

**IB Theory of Knowledge A/B**

04-304-H-025-11 (11A)  
 04-304-H-025-21 (11B)  
 04-304-H-025-12 (12A)  
 04-304-H-025-22 (12B)

**SOC380/381****SOC480/481**

Open to 11-12 1 credit

*Recommended: International Baccalaureate Diploma Candidate*  
 Theory of Knowledge provides a connecting link for the learner to synthesize the approaches to understanding gained over the course of IB study. TOK is taken every other day with seminar on alternating days. Students will explore and apply the eight Areas of Knowledge and eight Ways of Knowing. The course raises questions about the validity of knowledge, and in so doing seeks a cross-curricular understanding of how a learner learns and, ultimately, knows. Students will pursue a wide range of readings to be examined in a Socratic Seminar setting combining literature, history, science, mathematics, and fine arts, among others. This course should be taken by students who are pursuing the International Baccalaureate Diploma.

**IB Spanish SL A/B**

24-063-H-050-11 (11A)  
 24-063-H-050-21 (11B)  
 24-063-H-050-12 (12A)  
 24-063-H-050-22 (12B)

**FOR362/363****FOR462/463**

Open to 11-12 2 credits

*Recommended: WCSD Pre-IB Spanish II or Spanish III.*

IB Spanish SL is a two-year course emphasizing communication and culture. Students will continue to use the grammatical structures from the previous levels of study and learn more advanced structures while perfecting written and oral communication skills. Students sitting for the SL exam must have studied the language for at least four years. Five years of the language is strongly recommended.

## **IB German SL A/B**

06-211-H-050-11 (11A)

06-211-H-050-21 (11B)

06-211-H-050-12 (12A)

06-211-H-050-22 (12B)

Open to 11-12 (W)

**FOR310/311**

**FOR410/411**

2 credits

*Recommended: WCSD Pre-IB German II.*

IB German SL is a two-year course that emphasizes language acquisition and the development of language skills. The course aims to cultivate students' intercultural understanding and to help students understand and use German in a variety of contexts and for a variety of purposes. IB German SL students-through social interactions and the study of a range of text types-develop an awareness and appreciation of the different perspectives of people from other cultures. Students sitting for the SL exam must have studied the language for at least four years of coursework.

# Art



	Course Title	9	10	11	12		Credits	Recommended Prerequisite
ART100	Fundamentals of Art and Design	X	X	X	X		1	
ART101	Drawing and Painting	X	X	X	X		1	Yes
ART102	Sculpture and Ceramics	X	X	X	X		1	Yes
ART103	Jewelry Design	X	X	X	X		1	Yes
ART104	Mixed Media Design	X	X	X	X		1	
ART200	Graphic Design		X	X	X		1	Yes
ART201	Photography		X	X	X		1	Yes
ART470	WCSD Pre-IB Medium Exploration			X	X		1	Yes
ART472	WCSD Pre-IB Investigations Through Art			X	X		1	Yes
ART300 courses	Advanced Studio Courses		X	X	X		1	Yes
ART400 courses	Independent Study Courses		X	X	X		1	Yes

All courses emphasize 21st century skills and literacy development. Instruction is differentiated to meet the needs of all students. The special education service delivery plan outlines services available for students with an Individualized Education Program (IEP).

## Fundamentals of Art and Design

05-151-G-050-00

Open to 9-10-11-12

## ART100

1 credit

This class must be taken before any courses in the art department with the exception of Mixed Media Design. Students will learn about the elements of art, principles of design, hemisphericity, critique and analysis, methods and techniques, and visual literacy. Students will create art projects in a variety of mediums including both 2 and 3 dimensional.

A sketchbook is required for this course.

## STUDIO COURSES

## Drawing and Painting

05-155-G-050-10

Open to 9-10-11-12

## ART101

1 credit

*Recommended: Fundamentals of Art and Design*

Students will learn various drawing and painting techniques and complete assignments using a variety of mediums including graphite, pastels, watercolors, acrylic paint and ink.

A sketchbook is required for this course.

## Sculpture and Ceramics

05-158-G-050-10

Open to 9-10-11-12

## ART102

1 credit

*Recommended: Fundamentals of Art and Design*

Students will work with three-dimensional media such as clay, wood, plaster and paper. Hand-built and wheel-thrown forms of clay construction are also part of this course.

## Jewelry Design

05-166-G-050-10

Open to 9-10-11-12

## ART103

1 credit

*Recommended: Fundamentals of Art and Design*

Students will learn the process of wire working, metal forming, sawing, soldering, metal piercing, glass, clay, and finishing jewelry. Specific design assignments will be the focus to formulate ideas for jewelry.

## Mixed Media Design

05-165-G-050-10

Open to 9-10-11-12

## ART104

1 credit

Students will apply the elements of art and principles of design to create unique 2 and 3-dimensional works of art. Students will be introduced to current trends in the mixed media and crafting industry. Focus will be on learning about a variety of mediums, tools, methods and techniques.

## Graphic Design

05-162-G-050-10

Open to 10-11-12

## ART200

1 credit

*Recommended: Fundamentals of Art and Design*

Students will work on a variety of graphic design projects including illustration, typography, package design, stage design and computer graphics. Students will learn elements of Adobe Master Collection software for use in digital projects.

A sketchbook is required for this course.

**Photography**

05-167-G-050-10

Open to 10-11-12

**ART201**

1 credit

*Recommended: Fundamentals of Art and Design*

Students will develop an understanding of the use of cameras. Composition, focal control, printing photographs, and use of lighting will be focus areas. The use of Adobe Photoshop will be practiced for editing photos. Students may take Advanced Photography after taking Photography.

**WCSD Pre-IB Medium Exploration**

05-154-E-050-00

Open to 10-11-12

**ART470**

1 credit

*Recommended: Student must be Pre-IB Visual Arts or have successfully completed Fundamental of Art. Teacher approval required.*

An accelerated and advanced exploration of materials designed to acquaint students with the basic elements of art and provide students with experiences in the use of a variety of art media. Students will identify two and three dimensional processes as well as identify the functions of the visual arts in our society.

**WCSD Pre-IB Investigations Through Art History** **ART472**

05-152-E-050-10

Open to 10-11-12

1 credit

*Recommended: Student must be Pre-IB Visual Arts or have successfully completed Fundamental of Art. Teacher approval required.*

This course is an investigation of diverse artistic traditions of cultures from prehistory to the present. Students will learn visual and contextual skills by exploring art making processes and products through art history. Artist comparative study will be the end product of this course.

**Advanced Studio Courses & Independent Study**

*Recommended: Fundamentals of Art and Design and Studio Course(s) in selected area.*

Open to 10-11-12

A studio course may be repeated for advanced credit or as independent study. Advanced course opportunity will allow students to develop a collection of individual work for their portfolio based on original concepts. The portfolios may be necessary for scholarship application, career search, and college entrance. Expectations for advanced studio course work/Independent study will be set between the individual instructor and student.

Only students passing Fundamentals of Art and Design with a C or higher are encouraged to take studio courses. Students who have not achieved that level of mastery will have difficulty in studio classes.

Students will be considered for approval depending on: available space in the classroom and prior grades. Students applying for Independent study must be highly motivated.

**Advanced Studio Courses**

ART300	Advanced Drawing and Painting	05-155-G-050-20
ART301	Advanced Sculpture and Ceramics	05-158-G-050-20
ART302	Advanced Jewelry Design	05-166-G-050-20
ART303	Advanced Photography	05-167-G-050-20
ART305	Advanced Graphic Design	05-162-G-050-20
ART306	Advanced Mixed Media Design	05-165-G-050-20

**Independent Study Courses**

ART450	Independent Study Drawing and Painting	05-155-G-050-30
ART451	Independent Study Sculpture & Ceramics	05-158-G-050-30
ART452	Independent Study Jewelry	05-166-G-050-30
ART453	Independent Study Photography	05-167-G-050-30
ART455	Independent Study Graphic Design	05-162-G-050-30
ART456	Independent Study Mixed Media	05-165-G-050-30

# Business, Finance, Marketing and Management



	Course Title	9	10	11	12		Credits	Recommended Prerequisite
BUS303	J.A. Economics		X	X	X		1	
BUS304	Business Law		X	X	X		1	
BUS326	Exploring Business & Marketing Careers	X	X	X	X		1	
BUS328	Intro to Entrepreneurship			X	X		1	
BUS323	Business Internship				X			
BUS325	Marketing Management Internship				X			
COM101	Introduction to Computers I	X	X	X	X		1	
COM110	Computer Applications I	X	X	X	X		1	Yes
COM204	Computer Applications II	X	X	X	X		1	Yes
COM205	Introduction to Audio Production		X	X	X		1	
COM210	Introduction to Video Production		X	X	X		1	
COM211	Internet Applications	X	X	X	X		1	Yes
	Digital Mass Media Internship				X			
COM600/601	Intro to Word Processing I A/B	X	X	X	X		2	
BUS310	Introduction to Business *			X	X		1	Yes
BUS220	Introduction to Accounting I *		X	X	X		1	
BUS320	Introduction to Accounting II *			X	X		1	
BUS322	Sports Marketing *			X	X		1	
COM203	Introduction to Web Design *		X	X	X		1	
	MOC							
CAR400/401	Career Internship Related Class				X		2	Yes
CAR402/403 CAR404/405	Career Internship Work Experience				X		2	Yes
CAR802/803	Work-Based Learning Related Class A/B			X	X		1	Yes
CAR800/801 CAR900/901	Work-Based Learning Internship I A/B Work-Based Learning Internship II A/B			X	X		2	Yes

\* Concurrent courses with Hawkeye Community College must meet entrance requirements.

## Integrity / Internet Contracts

Significant technology is available to students at Expo, East and West High Schools. Each student must sign *Integrity/Internet contract(s)* as required by the schools and the district prior to using any computers; this includes computers and computer-based curriculum work in many courses, and Internet access. This also includes the Media Center, where a signed contract allows students use of the computer card catalog, word processing, and multiple resources.

All courses emphasize 21st century skills and literacy development. Instruction is differentiated to meet the needs of all students. The special education service delivery plan outlines services available for students with an Individualized Education Program (IEP).

### Junior Achievement Economics

12-105-G-050-00

Open to 10-11-12

Students study JA economics (a REAL company), learn about the U.S. free enterprise system, and explore their roles as citizens, producers and consumers while studying fundamental economic principles. Students will sell stock, develop a product, and run a real company. **This course counts as an Economics credit.**

### BUS303

1 credit

### Business Law

12-054-G-050-00

Open to 10-11-12

Students will be given an introduction to the concepts of law that relate to business. Major topics include sources of law and ethics, criminal law, civil law, alternative dispute resolution, torts, contracts, consumer protection, real property, negotiable instruments, and employment. Students analyze real cases to uncover the nature of these topics. Students also develop a sense for how and why businesses may behave in certain ways.

### BUS304

1 credit

**Exploring Business & Marketing Careers**

12-001-G-050-00

Open to 9-10-11-12

**BUS326**

1 credit

An introduction to Business pathways. No matter your future career path, everyone works for a business. Students will get hands-on experience with a variety of careers including: management, entrepreneurship, law, human resource, accounting, variety of marketing areas, and advertising. Along with learning about careers, students will gain knowledge about the seven marketing functions and be provided with opportunities to learn and identify consumer concepts.

**Intro to Entrepreneurship**

12-053-G-050-00

Open to 11-12

**BUS328**

1 credit

If you are able to identify a need and want to find a way to fill it, you may be an entrepreneur. Our entrepreneur pathway will give students an experience-based approach to small business ownership. You will develop business ideas, write a business plan, identify finance sources and practice economic concepts with business ownership. Students may compete with other high school entrepreneurs in national competitions.

**Business Internship**

12-048-G-050-00

Open to 12

**BUS323**

1 credit

Seniors in the Business Management and Administration Pathway have the opportunity to work with a professional in their desired profession. Interns spend 8 to 20 hours a week at their internship site completing work assignments, attending meetings, and developing special projects requested by the sponsor. The intern has the opportunity to make contributions to the organization while achieving personal, academic, and career growth. Interns can schedule classes and still participate in an internship experience on a part-time basis. Interns spend the first three weeks of the semester attending classes as part of the internship. Once students begin their internship, they meet once a week to share and reflect on their experiences. Curriculum for the seminars includes career development, communication skills, problem solving, leadership, and decision-making skills integrated with technology. Interns participate in self-assessments and pursue personalized learning plans. Technology is used to assist students in creating polished presentations and the computer lab is utilized for all assignments.

**Marketing Management Internship**

12-198-G-050-00

Open to 12

**BUS325**

1 credit

Seniors in the Marketing Management Pathway have the opportunity to work with a professional in their desired profession. Interns spend 8 to 20 hours a week at their internship site completing work assignments, attending meetings, and developing special projects requested by the sponsor. The intern has the opportunity to make contributions to the organization while achieving personal, academic, and career growth. Interns can schedule classes and still participate in an internship experience on a part-time basis. Interns spend the first three weeks of the semester attending classes as part of the internship. Once students begin their internship, they meet once a week to share and reflect on their experiences. Curriculum for the seminars includes career development, communication skills, problem solving, leadership, and decision-making skills integrated with technology. Interns participate in self-assessments and pursue personalized learning plans. Technology is used to assist students in creating polished presentations and the computer lab is utilized for all assignments.

**Intro to Computers I**

10-001-G-050-00

Open to 9-10-11-12

**COM101**

1 credit

*This course is strongly recommended to be taken before any other computer class.*

This course is designed to be taken before other technology classes especially Computer Applications I or II. Students will improve their word processing, graphic skills, presentations, table creation, online resource use, document formatting, and typing skills. Focus is placed on information processing for future success of all students.

**Computer Applications I**

10-005-G-050-10

Open to 9-10-11-12

**COM110**

1 credit

*Recommended: C– or higher in Intro to Computers I*

This class prepares students to take the Microsoft Word certification exam. The class focuses on Microsoft Word skills. The semester final will be the Microsoft Certification Exam for Word.

**Computer Applications II**

10-005-G-050-20

Open to 9-10-11-12

**COM204**

1 credit

*Recommended: C– or higher in a Computer Applications I class*

This class prepares students to take the Microsoft Excel and Power Point certification exams. The class focuses on Microsoft Excel and Power Point skills. The semester final will be the Microsoft Certification Exam for Power Point and Excel (Microsoft Word will be available).

**Introduction to Audio Productions**

10-249-G-050-00

Open to 10-11-12

**COM205**

1 credit

Students will create, edit, and apply audio to projects such as voiceovers, commercials, videos, songs, etc.

**Introduction to Video Production**

10-202-G-050-00

Open to 10-11-12

**COM210**

1 credit

Students will explore video editing software. Topics include daily announcements, commercials, video productions, and use of Adobe and other industry standard software.

**Internet Applications**

10-008-G-050-00

Open to 9-10-11-12

**COM211**

1 credit

*Recommended: C– or higher in Computer Applications type class (Intro to Computers I or Computer Applications I or II)*

This course will give students hands-on experience with multimedia and Web applications at an introduction level. Topics covered: video production, desktop publishing, mobile app creation, web design, Adobe software, and graphic design.

**Digital Mass Media Internship**

10-098-G-050-04

Open to 12

**COM**

1 credit

Seniors in the Arts, A/V Technology & Communications Pathway have the opportunity to work with a professional in their desired profession. Interns spend 8 to 20 hours a week at their internship site completing work assignments, attending meetings, and developing special projects requested by the sponsor. The intern has the opportunity to make contributions to the organization while achieving personal, academic, and career growth. Interns can schedule classes and still participate in an internship experience on a part-time basis. Interns spend the first three weeks of the semester attending classes as part of the internship. Once students begin their internship, they meet once a week to share and reflect on their experiences. Curriculum for the seminars includes career development, communication skills, problem solving, leadership, and decision-making skills integrated with technology. Interns participate in self-assessments and pursue personalized learning plans. Technology is used to assist students in creating polished presentations and the computer lab is utilized for all assignments.

**Intro to Word Processing I A/B**

12-005-S-050-00 (A)

12-005-S-050-00 (B)

Open to 9-10-11-12

**COM600/601**

2 credits

Students will be provided instruction in proper computer keyboarding techniques. Keyboard mastery, speed, and accuracy on straight copy are stressed. These skills are then applied to word processing, personal and business letters, memos, reports and tables. Students will learn the basic functions of Microsoft Word. Requirements will include proper keyboard techniques, timed writings, word processing assignments and tests.

**Introduction to Business**

12-051-C-050-00

Open to 11-12

**BUS310**

1 credit

Hawkeye Community College BUS102

3 credits

*Compass Cut Scores must be met.*

An introductory survey course which provides an overview of the major functions in business with relation to current social, economic, and environmental concerns.

**Introduction to Accounting I**

12-104-C-050-10

Open to 10-11-12

**BUS220**

1 credit

Hawkeye Community College ACC115

4 credits

*Entrance requirements may apply.*

This course presents the fundamental concepts, procedures, and applications of the accounting cycle for service and merchandising businesses. The proprietorship form of ownership is studied. Topics include the special journals, payroll accounting, and accounting for cash.

**Introduction to Accounting II**

12-104-C-050-20

Open to 11-12

Hawkeye Community College ACC116

*Entrance requirements may apply.*

This course is a continuation of Intro to Accounting emphasizing the principles of accrual accounting. Emphasis is placed on accounting for corporations and a manufacturing business. Topics include accounting for receivables, inventory, and long-term assets.

**BUS320**

1 credit

4 credits

**Sports Marketing**

12-163-C-050-00

Open to 11-12

Hawkeye Community College MKT198

*Entrance requirements may apply.*

This course will explain the basics of sports marketing, research and delivery.

**BUS322**

1 credit

3 credits

**Introduction to Web Design**

10-201-C-050-00

Open to 10-11-12

Hawkeye Community College GRA150

*Recommended: C- or higher in Intro to Computers, Computer Applications, or Internet Applications.*

Students will learn the basic concepts of Hyper Text Mark Language (HTML) and Cascading Style Sheets (CSS).

**COM203**

1 credit

3 credits

**MOC (Multi-Occupations Cooperative)**  
**Co-op Career Internship**

This course offering provides on-the-job training (including apprenticeships) in any of the occupational areas with the related classroom instruction and is available to all high school seniors with coordinator approval. MOC Career Internship is an instructional method that combines the efforts and resources of the employment community and the school to jointly prepare students for future employment and further education. Students accepted into this course offering have the opportunity to do "flex-work" schedules around their school classes and/or extra-curricular activities if needed. Students will receive credit for both the related class and their paid work experience. This course offering includes the following two components:

**Career Internship Related Class** **CAR400/401**

22-152-G-050-10  
22-152-G-050-20

Open to 12 2 credits  
*Co-requisite: Requires Career Internship Work Experience with parental permission and coordinator approval, maximum 10 absences during junior year, and minimum 2.0 GPA. Transportation is the responsibility of the student.*

This program helps students apply classroom knowledge and theory to practical work situations via a paid position related to the student's classroom study, educational, and/or career goals. This program combines academic classes with relevant work-based learning experience to enhance the learning process and enable students to explore possible employment choices and improved knowledge of what skill or preparation is necessary for a successful career. Throughout the course, students will develop a greater understanding of their academic and career interests, interpersonal and professional skills, verbal and written communication skills, and improve their overall ability to work with others. Students are placed in on-campus or community work sites and work approximately 15 hours each week.

**Career Internship Work Experience** **CAR402/403/404/405**

22-998-G-100-10  
22-998-G-100-20

Open to 12 2 credits  
*Co-requisite: Requires Career Internship Related Class with parental permission, coordinator approval, maximum of 10 absences during junior year, and minimum 2.0 GPA. Transportation is the responsibility of the student.*

The work based learning course provides students with relevant learning experiences in the workplace and the opportunity to develop employability skills. This program assists students in developing workplace skills, building confidence on-the-job, observing different professions, networking with people in the field, and establishing professional development goals. Students are required to work an average of 15 hours per week at a location agreed upon by the coordinator and student.

**Work-Based Learning Related Class A/B** **CAR802/803**

22-153-S-050-00 (A)  
22-153-S-050-00 (B)

Open to 11-12 1 credit  
*Recommended Co-requisite: Worked Based Learning Internship along with IEP team decision*

Class instruction correlates with on-the-job instruction and reinforces traits such as punctuality, communication skills, honesty, teamwork, quality orientation, and customer/client orientation. The content of all instruction is organized around the skill development needed by students, and includes an overview of occupational opportunities and educational requirements.

**Work-Based Learning Internship A/B** **CAR800/801**

22-998-S-100-00 (A)  
22-998-S-100-00 (B)

Open to 11-12 2 credits

**Work-Based Learning Internship II A/B** **CAR900/901**

22-998-S-100-00 (A)  
22-998-S-100-00 (B)

Open to 11-12 2 credits  
*Recommended Co-requisite: Worked Based Learning Related Class along with IEP team decision*

This work-based learning experience provides students the opportunity to develop and apply knowledge, skills, and employability attitudes and behaviors leading to better-informed career choices and productive employment. Students will be placed at a community-based work site. This work-based learning component involves responsibility and experience in applying skills relevant to the student's plans for further education and career objective. Transportation to and from work site is provided.



# English



	Course Title	9	10	11	12		Credits	Recommended Prerequisite
RDG100/101	Reading Workshop A/B	X	X	X			2	
ENG100/101	English 9 A/B	X					2	
ENG600/601 ENG060/061	English 9 A/B Individualized English 9 A/B	X					2	
ENG102/103	Advanced English 9 A/B	X					2	
ENG200/201	English 10 A/B		X				2	
ENG700/701 ENG070/071	English 10 A/B Individualized English 10 A/B		X				2	
ENG202/203	Advanced English 10/WCSD Pre-IB	X	X				2	
ENG205	Creative Writing		X	X	X		1	
ENG206	Journalism		X	X	X		1	
ENG209	Theatre Arts	X	X	X	X		1	
ENG210	Advanced Theatre Arts			X	X		1	Yes
ENG104	Musical Theatre	X	X	X	X		1	
ENG211/212	Advanced Musical Theatre A/B		X	X	X		2	Yes
ENG300/301	American Literature/Composition A/B			X	X		2	
ENG800/801 ENG080/081	American Literature/Composition A/B Individualized American Lit/Comp A/B			X	X		2	Yes
ENG302	Advanced American Literature/WCSD Pre-IB		X	X	X		1	
ENG303	Advanced Composition/WCSD Pre-IB		X	X	X		1	
ENG304/305	AP English Language & Composition A/B/ WCSD Pre-IB		X	X			2	
ENG306	Contemporary Literature			X	X		1	
ENG309	Speech			X	X		1	
ENG310	Children's Literature			X	X		1	
ENG400/401	AP English Literature & Composition A/B				X		2	
ENG402	Business Communications			X	X		1	
ENG900/901 ENG090/091	Business Communications I/II Individualized Business Communications I/II			X	X		2	
ENG405	World Literature			X	X		1	
ENG406	American Masterpieces			X	X		1	
ENG409	Writing in the Workplace			X	X		1	
ENG415	English 12 B				X		1	Yes
CAR480/481	Publications: Newspaper A/B		X	X	X		2	Yes
CAR326/327 CAR426/427 CAR428/429	Publications: Yearbook I A/B Publications: Yearbook II A/B Publications: Yearbook III A/B		X	X X X	X X X		2	Yes
ENG410	Fundamentals of Oral Communications *			X	X		1	Yes
ENG411	Composition I *			X	X		1	Yes
ENG414	Composition II *			X	X		1	Yes

	Course Title	9	10	11	12		Credits	Recommended Prerequisite
RDG600/601 RDG060/061	Literacy I A/B Individualized Literacy I A/B	X	X	X	X		2	
RDG700/701 RDG070/071	Literacy II A/B Individualized Literacy II A/B	X	X	X	X		2	
RDG800/801 RDG080/081	Literacy III A/B Individualized Literacy III A/B	X	X	X	X		2	
HIM100/101 HIM201/202 HIM301/302 HIM401/402	English I, II, III, IV (Hearing Impaired)	X	X	X	X		2	
LCC124/125 LCC224/225	Real World Writing I, II A/B	X	X	X	X		2	
LCC420/421 LCC520/521	Real World Reading I, II A/B	X	X	X	X		2	

\* Concurrent courses with Hawkeye Community College must meet entrance requirements.

Eight English credits are required for graduation. Students are required to successfully complete English 9 and 10, and American Literature / Composition. To earn the 8 English credits, students must successfully complete two additional electives. A writing elective course is highly recommended. **Newspaper and Yearbook count as general electives. They do not count toward required English credits.**

All courses emphasize 21st century skills and literacy development. Instruction is differentiated to meet the needs of all students. The special education service delivery plan outlines services available for students with an Individualized Education Program (IEP).

<b>Grade 9</b>	<b>Required:</b>	English 9 or Adv English 9 or WCSD Pre-IB Adv English 10 Reading Workshop
	<b>Electives:</b>	Theatre Arts, Musical Theatre
<b>Grade 10</b>	<b>Required:</b>	English 10, or Adv English 10/WCSD Pre-IB Creative Writing
	<b>Electives:</b>	Journalism, Reading Workshop, WCSD Pre-IB Adv Am Lit., WCSD Pre-IB Adv Composition, Theatre Arts, Musical Theatre/Adv
<b>Grade 11</b>	<b>Required:</b>	American Literature / Composition <b>OR</b> AP English Language/Composition <b>OR</b> Adv American Literature/WCSD Pre-IB, <b>AND</b> a composition course from among the following: Advanced Composition/WCSD Pre-IB, Creative Writing, Journalism, Writing in the Workplace
	<b>Electives:</b>	Adv Composition/WCSD Pre-IB, American Masterpieces, Business Communications, Contemporary Literature, Creative Writing, Journalism, Reading Workshop, Speech, Writing for College & Career, Theatre Arts/Adv, World Literature, Children's Literature, Fundamentals of Oral Communications, Composition I/II, Musical Theatre/Adv, IB Theatre Arts HL, IB Language & Literature English HL
<b>Grade 12</b>	<b>Electives:</b>	Adv Composition/WCSD Pre-IB, AP English Literature/Composition, American Masterpieces, Business Communications, Contemporary Literature, Creative Writing, Journalism, Speech, Writing in the Workplace, Theater Arts/Adv., World Literature, Children's Literature, Fundamentals of Oral Communications, English 12 B, Composition I/II, Musical Theatre/Adv, IB Theatre Arts HL, IB Language & Literature English HL

**Reading Workshop A/B**

01-067-B-050-10 (A)

01-067-B-050-20 (B)

Open to 9-10-11

2 credits

Reading Workshop is designed to improve a student's reading comprehension, increase reading fluency (words read per minute) and develop knowledge, usage and mastery of vocabulary. One reading lesson per month focuses on a specific career from each of the academies.

**This course may be repeated for elective credit.**

The credit for this class does NOT fulfill one of the eight required English credits.

**RDG100/101****English 9 A/B**

01-001-G-050-10 (9A)

01-001-G-050-20 (9B)

**English 9 A/B****Individualized English 9 A/B**

01-001-S-050-00 (9A)

01-001-S-050-00 (9B)

Open to 9

2 credits

This course introduces students to the five elements of language arts (reading, writing, speaking, listening, and viewing) at the high school level. Emphasis is on reading for comprehension. Students study the principles of vocabulary building. Speech activities involve experiences in critical listening and an introduction to public speaking. The literature unit includes non-fiction/short story, mythology, drama, poetry, and a novel. Literature, mythology, and speech activities will be designed to reflect an academy focus. Students will begin the process of writing including but not limited to narrative, informational, and persuasive styles.

**ENG100/101****ENG600/601****ENG060/061****Advanced English 9 A/B**

01-001-E-050-10 (9A)

01-001-E-050-20 (9B)

Open to 9

2 credits

This course introduces students to five elements of language arts (reading, writing, speaking, listening, and viewing) at the high school level. Emphasis is on the concept of writing as a process. A portfolio may be required of students. Students study the principles of vocabulary building. Speech activities involve experiences in critical listening and an introduction to public speaking. The literature unit includes non-fiction/short story, mythology, drama, poetry, a novel and writing which involves research. Timed essay writing will deepen advanced habits, along with commentary work in a formal manner. Composition assignments may be longer and more complex. Students will begin to lead discussions on story or poetry.

**ENG102/103****English 10 A/B**

01-002-G-050-10 (10A)

01-002-G-050-20 (10B)

**English 10 A/B****Individualized English 10 A/B**

01-002-S-050-00 (10A)

01-002-S-050-00 (10B)

Open to 10

2 credits

This course further develops the student's appreciation and knowledge of literary genres, speaking skills, and writing competency. This course is an extension of the composition skills developed in English 9 and includes training in writing and revising full-length, multi-paragraph essays. Speech activities include expository speaking, recitation, and persuasion. The literary study includes a novel, selected nonfiction, poetry and short stories. Students will write a

**ENG200/201****ENG700/701****ENG070/071**

research paper regarding a self-chosen topic. Collaborative work, use of technology tools, and presentations are part of the learning process.

**Advanced English 10 A/B**

Open to 10

**ENG202/203**

2 credits

**WCSD Pre-IB Advanced English 10 A/B**

Open to 9-10

01-002-E-050-10 (10A)

01-002-E-050-20 (10B)

2 credits

This course will further develop the student's appreciation and knowledge of literary genres, speaking skills, and writing competency. This course is an extension of the composition skills developed in English 9 and includes training in writing and revising full-length, multi-paragraph essays and is designed to elevate the quality of expository, analytical, and critical writing generated by students. Students will recognize and use effectively the elements of writing, research, literature, speaking and listening, and vocabulary. Speech activities include expository speaking, recitation, and persuasion. The literary study includes timed essays over a literary piece and comparative analysis essay completion. Students will write a research paper regarding a self-chosen topic. Advanced students may study a greater number of selections with deeper interpretation to develop higher order thinking skills. Composition assignments may be longer and more complex. Students will work on commentary pieces and lead discussions on story or poetry.

**Creative Writing**

01-104-G-050-00

Open to 10-11-12

**ENG205**

1 credit

This course will familiarize the student with various aspects of imaginative writing and develop an appreciation for the subtle understanding of language. Topics covered are creative nonfiction/fiction writing, drama writing and poetry writing. Lengths of assignments will vary.

**Journalism**

11-101-G-050-00

Open to 10-11-12

**ENG206**

1 credit

Students will study all facets of mass communication. This advanced course teaches the writing of news stories, features, editorials, in-depth articles, headlines, layouts and designs. This course is a prerequisite for the newspaper and recommended for the yearbook staff.

**Theatre Arts**

05-051-G-050-00

Open to 9-10-11-12

**ENG209**

1 credit

Theatre Arts is a performance and theory based class that introduces students to the fundamentals of theatre arts. In this course, students create, rehearse, and present theatre in front of their peers and the instructor. The course offers engaging, creative, and fun projects allowing students to tap into their creativity, gain self-confidence, and experience working collaboratively with others. Through instruction, training, and performance experiences, the student will develop knowledge and skills critical to the following career pathways: the performing arts, journalism and broadcasting, telecommunications, visual arts, and audio and film technology. As students gain a broader theatre arts background, they develop other skills that have application to college and careers in and beyond theatre – communication, leadership and teamwork,

presentation and performance skills, creative, imaginative problem solving, and critical thinking.

### **Advanced Theatre Arts**

05-052-G-050-00

Open to 11-12

**ENG210**

1 credit

*Theatre Arts or instructor approval based on proof of competency. For requisite skills, see Theatre Arts description.*

Students enrolled in Adv Theatre Arts are seeking advanced study and further application of the competencies acquired in the Theatre Arts. Through advanced instruction, training, and performance experiences in the theatrical arts, the student will develop knowledge and skills critical to the following career pathways: the performing arts, journalism and broadcasting, telecommunications, visual arts, and audio and film technology. Adv Theatre Arts will continue to develop competencies in communication; leadership and teamwork; presentation and performance skills; creative, imaginative problem solving and critical thinking.

### **Musical Theatre**

05-060-G-050-11

Open to 9-10-11-12

**ENG104**

1 credit

*Recommended: Theatre Arts, Adv Theatre Arts, Teacher approval*

Musical Theatre explores American history and culture through the experience of American Musical Theatre genre. Instruction will focus on three areas of concentration: musical theatre in context, musical theatre processes, and presenting musical theatre. Students will first study its history and those contributing to its development: creators, producers, designers, directors, performers, and choreographers. Students pursuing future pathways in college or Fine Arts careers can elect to perform musical theatre work in class. Through study, active participation, and self-reflection, students will develop performance techniques in acting, movement, and voice. Instruction will focus on musical theatre history, literature, acting technique and theory, voice and movement technique, dramatic criticism, auditioning, elements of song and dance and other advanced concepts related to musical theatre performance and production. The goal is to develop competencies in the performing arts and the discipline necessary to succeed in college and future career pathways in and beyond musical theatre.

### **Advanced Musical Theatre A/B**

05-060-G-050-12 (A)

05-060-G-050-22 (B)

Open to 10-11-12

**ENG211/212**

2 credits

*Recommended: Audition*

Students will meet on a daily basis and is by audition only. Students will have the opportunity to thoroughly investigate the art of performance through the combined studies of drama, vocal music, and dance that serves as a performance ensemble. Areas of advanced concentration will include musical theatre history, literature, acting, criticism, auditioning, skills training, elements of song and dance and other advanced concepts related to performance and production.

### **American Literature/Composition A/B**

01-003-G-050-10 (A)

01-003-G-050-20 (B)

**ENG300/301**

### **American Literature/Comp. A/B**

### **Indiv. American Lit./Comp. A/B**

01-003-S-050-00 (A)

01-003-S-050-00 (B)

Open to 11-12

**ENG800/801**

**ENG080/081**

2 credits

Students will develop reading, writing, viewing, and thinking skills through the exploration of fiction, and nonfiction literature, including poetry and drama. The course provides a basic overview of the chronological development of literature in America. The writing component in the course will focus on common errors in grammar, usage, and mechanics within the context of essay writing as well as through daily practice. Students are expected to share their writing and critique the writing of others. Collaborative work, use of technology tools, and formal presentations are part of the learning process.

### **Advanced American Literature**

Open to 11-12

**ENG302**

1 credit

### **WCSD Pre-IB Advanced American Literature**

Open to 10

01-054-E-050-00

1 credit

Students will develop advanced reading, thinking, viewing, and writing skills necessary for success in college through the exploration of fiction and nonfiction literature. This course provides a rigorous, in-depth chronological approach to American literature and hones the skills of literary analysis through both written and oral commentary. Genres studied include short story, poetry, novel and drama.

### **Advanced Composition**

Open to 11-12

**ENG303**

1 credit

### **WCSD Pre-IB Advanced Composition**

Open to 10

01-103-E-050-00

1 credit

Students will develop writing skills necessary for success in college. Emphasis is placed on the writing of argumentative and expository essays as well as formal research papers with collaborative work included. This course provides students with an opportunity to develop high-level research and writing skills, and apply intellectual discovery and creativity. This course allows students to formally develop and present structured writing. Students are expected to share their writing, to give formal presentations including technology, and to critique the writing of others. It is recommended that this course be taken opposite of Adv. Am Literature or World Literature.

### **AP English Language/Composition A/B**

Open to 11

**ENG304/305**

2 credits

### **WCSD Pre-IB Language/Composition A/B**

Open to 10

01-005-H-050-10 (A)

01-005-H-050-20 (B)

2 credits

*Teacher approval based on proof of competency*

AP English Language/Composition is a course that prepares juniors to take the AP English Language test. This course includes a rigorous, in-depth approach to American literature and intensive writing designed to teach analysis and synthesis. Students will work on commentary pieces in this course to prepare them for college level rigor. Course assignments will be college level work. This course meets the requirements for American Literature and a composition course.

**Contemporary Literature**

01-053-G-050-00

Open to 11-12

**ENG306**

1 credit

This course is designed to improve reading skills and establish life-long reading habits. Students are expected to discuss and analyze a variety of required modern novels, plays, and selections of modern fiction and nonfiction.

**Speech**

01-151-G-050-00

Open to 11-12

**ENG309**

1 credit

Oral communication is an essential 21<sup>st</sup> Century Skill and highly useful in all disciplines. Speech is an educationally relevant course that provides students with an opportunity to become 'well spoken' while mastering fundamental oral communication skills applicable to real-world speaking situations and future career pathways. A process approach is used to teach students how to build and present effective oral presentations. Instructional units will improve speaking and listening skills for use in one-on-one communication, group presentations, digital storytelling, postsecondary courses, the world of work, and other pathways. Speech is highly recommended for students enrolled in the Arts, Business, and Communication Academy or individuals interested in 21<sup>st</sup> Century careers found in the Arts, Audio-Visual Technology, and Communication Career Cluster. Speech also develops essential 21<sup>st</sup> Century Employability Skills in Leadership, Communication, Multitasking, Computer Literacy, Teamwork and Problem Solving, and Dedication.

**Children's Literature**

01-065-G-050-00

Open to 11-12

**ENG310**

1 credit

This course is designed for those interested in literacy and/or working with youth. It promotes the selection and evaluation of literature for children and the engagement of young readers in a variety of literary genres. The course will emphasize literature as a key element of the reading curriculum, pre-school through twelfth grade. The course will be relevant to those interested in education and literacy.

**AP English Literature/Composition A/B**

01-006-H-050-10 (A)

01-006-H-050-20 (B)

Open to 12

**ENG400/401**

2 credits

*Teacher approval based on proof of competency*

Students will develop reading, thinking, and writing skills comparable to those encountered in college, and they will prepare to take the national AP English Literature/Composition test. Students are expected to complete the two-semester course. Students will read and analyze a variety of genres. This course meets the requirement for Advanced Composition and may be taken as an elective.

**Business Communications**

01-156-G-050-10

**ENG402****Business Communications I/II****ENG900/901****Indiv. Business Communications I/II****ENG090/091**

01-004-S-050-00 (I)

01-004-S-050-00 (II)

Open to 11-12

1 credit

Students will develop skills needed for successful communication in the workplace. Students will focus on career planning with extensive research in a career of the student's choice. Topics covered include basics of good communication: public speaking skills, clarity,

courtesy, consideration, correctness, conciseness and concreteness; the job interviewing process; creative work in planning for a new job interviewing process; creative work in planning for a new business; grammar and spelling. The course is recommended for students interested in Career Internship and those planning a career in business. Students will complete a career research unit, prepare a career portfolio, and make a presentation using technology.

**World Literature**

01-058-G-050-00

Open to 11 (with instructor approval) and 12

**ENG405**

1 credit

Students will develop reading, thinking, and writing skills necessary for success in college. This course presents literature from the world outside the United States. Drama, myth, poetry, novels, and essays will be covered in this course. It is recommended that students consider taking Advanced Composition as a semester course opposite World Literature, thus taking two courses as a year-long English course.

**American Masterpieces**

01-064-G-050-00

Open to 11-12

**ENG406**

1 credit

Students will develop reading, thinking and writing skills. This course is designed to establish a life-long reading habit; classic books by American authors will be read. This course represents in-depth analysis, discussion and research processes.

**Writing in the Workplace**

01-156-G-050-20

Open to 11-12

**ENG409**

1 credit

Students will develop skills needed for successful written correspondence in the workplace and compose a variety of documents using technology. This course emphasizes the informative and persuasive writing skills needed for successful communication in business or professional writing. Students taking this course may plan to attend a community college, join the armed services, enroll in a technical school, or begin a career immediately after graduation.

**English 12 B**

01-058-G-050-10

Open to 12

**ENG415**

1 credit

*Teacher recommendation*

This is an online English course open to PBDA and Expo students. Emphasis is on Literature and Writing.

**Publications: Newspaper A/B**

11-104-G-050-10 (A)

11-104-G-050-20 (B)

Open to 10 -11-12

**CAR480/481**

2 credits

*Recommended: Journalism and/or instructor approval based on proof of competency. For requisite skills, see Journalism description.*

Students will publish the school newspaper. Students learn layout and design, copy editing, advertising, desktop publishing and photo editing. Students are expected to sell advertising and meet deadlines. This course may be repeated for credit.

**Publications: Yearbook A/B**

11-104-G-050-10 (I A)	<b>CAR326/327</b>
11-104-G-050-20 (I B)	
11-104-G-050-12 (II A)	<b>CAR426/427</b>
11-104-G-050-22 (II B)	
11-104-G-050-13 (III A)	<b>CAR428/429</b>
11-104-G-050-23 (III B)	

Yearbook I	Open to 10-11-12	2 credits
Yearbook II	Open to 11-12	
Yearbook III	Open to 11-12	

*Instructor approval; Journalism and/or Creative Writing recommended*  
Students will develop a high school yearbook reflective of the year's activities. Course topics covered include methods of layout and design, computer technology, copy writing, photo editing, advertising, caption writing, meeting deadlines and selling ads. Students are expected to sell advertising. This course may be repeated for elective credit.

**Fundamentals of Oral Communication** **ENG410**

01-151-C-050-00	
Open to 11-12	1 credit
Hawkeye Community College SPC101	3 credits
<i>Prerequisite: Approval process and must meet Compass score requirement</i>	

This college course presents elements of the oral communications process with emphasis in developing interpersonal, small group, and public speaking skills. Students will be involved in activities that provide opportunity for the understanding and improvement of their oral communication skills.

**Composition I** **ENG411**

01-103-C-050-00	
Open to 11-12	1 credit
Hawkeye Community College ENG105	3 credits
<i>Prerequisite: Approval process, including an appropriate writing placement score and must meet Compass score requirement</i>	

This college course develops the student's writing skills by emphasizing fluency, organization, the use of supporting details, and research techniques. Writing is approached as a recursive process that includes prewriting strategies, drafting, revising, and editing. The course helps students define a sense of audience and purpose in their writing.

**Composition II** **ENG414**

01-103-C-050-00	
Open to 11-12	1 credit
Hawkeye Community College ENG106	3 credits
<i>Prerequisite: successful completion of English 105 Composition I</i>	

This course aims to review and extend writing principles learned in ENG 411 Composition I (fluency, thesis-driven organization, the use of supporting details, and research techniques, prewriting strategies, drafting, revising, and editing) to analytical, argumentative, and research-based writing. This course emphasizes critical reading, evaluation, and precise and responsible source citation. Both Comp I and Comp II must be taken in order for the Composition credits to transfer to the three Iowa public universities.

**Literacy I A/B****Individualized Literacy I A/B**

01-067-S-050-00 (A)	
01-067-S-050-00 (B)	

Open to 9-10-11-12

1-2 credits

This course is designed to increase reading engagement and outcomes through feedback, practice, and ongoing assessment. Instruction focuses on word recognition, vocabulary and prediction. Instruction will focus on strategies for making predictions, building vocabulary, and word recognition. Data collection and continual assessment will be completed to monitor student ongoing progress.

**Literacy II A/B****Individualized Literacy II A/B**

01-067-S-050-00 (A)	
01-067-S-050-00 (B)	

Open to 9-10-11-12

1-2 credits

This course is designed as a continuation of Literacy I. Instruction will focus on strategies for making inferences, summarizing selections of text, and applying critical reading strategies when taking tests. Data collection and continual assessment will be completed to monitor student ongoing progress.

**Literacy III A/B****Individualized Literacy III A/B**

01-067-S-050-00 (A)	
01-067-S-050-00 (B)	

Open to 9-10-11-12

1-2 credits

This course is designed as a continuation of Literacy I & Literacy II. Instruction will focus on strategies for paraphrasing, summarizing selections of text, and applying critical reading strategies when taking tests. Data collection and continual assessment will be completed to monitor student ongoing progress.

**English I, II, III, IV A/B**

01-001-S-050-00	
01-001-S-050-00	
01-002-S-050-00	
01-002-S-050-00	
01-003-S-050-00	
01-003-S-050-00	
01-004-S-050-00	
01-004-S-050-00	

Open to 9-10-11-12

2 credits

In this course, students will experience writing, reading, signing and language. Emphasis will be on teaching English Concepts using sign language.

**RDG600/601**

**RDG060/061**

**RDG700/701**

**RDG070/071**

**RDG800/801**

**RDG080/081**

**HIM101/102**

**HIM201/202**

**HIM301/302**

**HIM401/402**

Participation in Life Centered Curriculum Courses is determined through an IEP team decision. The Course of Study within the IEP defines graduation requirements based on individual needs.

### **Real World Writing I, II A/B**

01-103-S-050-00 (A)

**LCC124/125**

01-103-S-050-00 (B)

01-103-S-050-00 (A)

**LCC224/225**

01-103-S-050-00 (B)

Open to 9-10-11-12

2 credits

In this series of courses students will learn and apply writing skills and strategies for writing found in daily life. This may include list making, completing personal information forms and job application, composing emails, writing cover letters and resumes, sentence and paragraph writing, journaling, writing thank you and other types of notes and documenting important information. Students will learn to use different forms of technology for writing based on their individual goals for future living, learning, and working environments.

### **Real World Reading I, II A/B**

01-067-S-050-00 (A)

**LCC420/421**

01-067-S-050-00 (B)

01-067-S-050-00 (A)

**LCC520/521**

01-067-S-050-00 (B)

Open to 9-10-11-12

2 credits

The content of this series of courses will be determined through data collection and continual assessment results. These courses are designed to improve reading engagement, oral reading fluency (expression, phrasing, rate, and accuracy) and comprehension. Instruction will include reading strategies to be applied across the curriculum. Students will be engaged in reading based on their individualized plans for life after high school. Examples may include reading schedules, signs, newspapers, weather, recipes, nutrition labels, home maintenance manuals, clothing care labels, websites, medical instructions, time sheets, etc. Students will learn to use technology in order to access a range of reading materials.



# English Language Learners (ELL)

	Course Title	9	10	11	12		Credits	Recommended Prerequisite
ELL026/027	ELL Learning Lab A/B *	X	X	X	X		2	
ENG001/002	ELL Intro A/B *	X	X	X	X		2	
ENG003/004	ELL Conversation A/B *						2	
ENG005/006	ELL Vocabulary Development and Skills *	X	X	X	X		2	
ENG008/009	ELL Intro to Content Vocabulary A/B *						2	
ENG010/011	ELL English I A/B *	X	X	X	X		2	
ENG020/021	ELL English II A/B *	X	X	X	X		2	
ENG022/023	ELL Reading Workshop A/B	X	X	X	X		2	
ENG026/027	ELL Strategies A/B *	X	X	X	X		2	
ENG050/051	ELL English 9 A/B *						2	
ENG054/055	ELL English 10 A/B *						2	
ENG032/033	ELL American Literature/Composition A/B *			X	X		2	
BUS020	ELL Keyboarding	X	X	X	X		1	
CAR005	ELL C <sup>3</sup> Foundations						1	
MAT012/013	ELL Pre-Algebra A/B	X	X	X	X		2	
MAT018/019	ELL Algebra I A/B	X	X	X	X		2	
MAT020/021	ELL Consumer Math I A/B						2	
PHE010	ELL Health and Life Management						1	
SCI010/011	ELL Physical Science A/B	X	X	X	X		2	
SCI020/021	ELL Biology A/B		X	X	X		2	
SCI030/031	ELL Ecology A/B						2	Yes
SCI035/036	ELL Earth and Space Science A/B	X	X	X	X		2	
SOC010/011	ELL U.S. History A/B	X	X	X	X		2	
SOC020	ELL U.S. Government	X	X	X	X		1	
SOC025	ELL Economics		X	X	X		1	
SOC030/031	ELL World History A/B		X	X	X		2	
SOC040	ELL Contemporary Affairs						1	
	* Language Instruction Education Program courses							

The Waterloo Community School District currently serves a growing population of limited English proficiency students. They represent countries and languages spoken in Europe, Africa, Asia, North and Central America, the Pacific and Caribbean Islands, and the Middle East.

All courses emphasize 21st century skills and literacy development. Instruction is differentiated to meet the needs of all students. The special education service delivery plan outlines services available for students with an Individualized Education Program (IEP).

## 9-12 ELL Program Goals

- Teach the English language, including receptive skills (listening and reading) and productive skills (speaking and writing). The focus is on teaching English through the content areas.
- Develop and/or reinforce positive attitudes toward school and positive self-concepts.
- Understand and learn to function within American society.
- Stimulate pride in the students' own culture and linguistic backgrounds and appreciate diversity.
- Develop competency in sheltered English, Mathematics, American History, and Science in preparation for mainstream content area instruction.
- Prepare for post-secondary training, academic or voc/tech, as well as the job market.



## ELL Courses

The listed ELL courses are available at West High for students with Limited English Proficiency (LEP). With the exception of special provisions that may be included in a personal progress plan, ELL students must meet all graduation requirements for the Waterloo Community School District in order to receive a West High diploma.

ELL courses correspond to the content area course descriptions, with modifications in strategy, resources and/or comprehensiveness as appropriate to the needs of ELL students. The ELL courses have specific content modifications to accommodate the needs of ELL students.

### **ELL Learning Lab A/B \***

01-008-S-050-00 (A)

01-008-S-050-00 (B)

Open to 9-10-11-12

2 credits

This course provides advanced or at-risk ELL students monitoring and tutoring with courses in the mainstream. Support is provided to help with the transition from ELL classes to mainstream and with continued language differences.

**ELL026/027**

### **ELL Intro A/B \***

01-009-S-050-00 (A)

01-009-S-050-00 (B)

Open to 9-10-11-12

2 credits

This course is designed to provide instruction in basic language skills, integrating reading, writing, speaking, and listening, while placing great emphasis on the progress of individual students. Course content depends upon students' abilities and may include vocabulary building, improving spelling and grammar, developing writing and composition skills, reading silently or aloud, and improving listening and comprehension abilities.

NOTE: This course provides credits that count toward the eight required English credits for graduation.

**ENG001/002**

### **ELL Conversation A/B \***

01-008-S-050-00 (A)

01-008-S-050-00 (B)

Open to 9-10-11-12

2 credits

This course is designed for entry-level non-English/limited English speakers. The focus of this course is on developing functional, social conversation and confidence with pronunciation. Critical areas such as sharing personal information, expressing likes and dislikes, emotions, medical situations, and describing people and things will be addressed.

**ENG003/004**

### **ELL Vocabulary Development and Skills A/B \***

01-008-S-050-00 (A)

01-008-S-050-00 (B)

Open to 9-10-11-12

2 credits

This course is designed for entry-level, non-English / limited English speakers. The focus of the course is on learning the basic vocabulary and pronunciation in the content areas of mathematics, science, history, and literature. Students will also study learning strategies. The course can be repeated for additional credit.

**ENG005/006**

### **ELL Intro to Content Vocabulary A/B \***

01-008-S-050-00 (A)

01-008-S-050-00 (B)

Open to 10-11-12

2 credits

This course is designed for entry-level non-English/limited English speakers. The focus of this course is on preparing newcomers for success in content classes. Introduction to basic content vocabulary from math, science, and history will be included.

**ENG008/009**

### **ELL English I A/B \***

01-009-S-050-00 (A)

01-009-S-050-00 (B)

Open to 9-10-11-12

2 credits

ELL English is a basic English class for English Language Learners. Students will learn more about sentence structure and the process used for writing paragraphs. The skills of listening, speaking, and reading will also be developed in conjunction with the writing and grammar.

NOTE: This course provides credits that count toward the eight required English credits for graduation.

**ENG010/011**

### **ELL English II A/B \***

01-009-S-050-00 (A)

01-009-S-050-00 (B)

Open to 9-10-11-12

2 credits

ELL English II is an intermediate English class for English Language Learners. The students will learn more about writing complex sentences and the process used for writing multiple paragraphs. The skills of listening, speaking, and reading will also be developed in conjunction with writing and grammar.

NOTE: This course provides credits that count toward the eight required English credits for graduation.

**ENG020/021**

### **ELL Reading Workshop A/B \***

01-067-S-050-00 (A)

01-067-S-050-00 (B)

Open to 9-10-11-12

2 credits

This course is designed to improve ELL student's reading comprehension **of grade level text**, increase his/her reading fluency (words read per minute), and develop his/her knowledge, usage, and mastery of **academic** vocabulary. This course provides instruction that focuses on using ELL learning strategies. The credit for this class does NOT fulfill one of the eight required English credits.

**ENG022/023**

### **ELL Strategies A/B \***

01-008-S-050-00 (A)

01-008-S-050-00 (B)

Open to 9-10-11-12

2 credits

This course provides support for ELL students who have not met the graduation requirement on the Iowa Assessments. Literacy and test-taking strategies will be introduced and practiced. The course also provides ELL students important information on the transition after high school and the comprehensive skills needed to be successful.

**ENG026/027**

### **ELL English 9 A/B \***

01-001-G-050-10 (A)

01-001-G-050-20 (B)

Open to 9

2 credits

This course is designed for the English Language Learner. ELL strategies and modifications are used to enhance understanding. This course introduces students to the five elements of language arts (writing, reading, speaking, listening, and viewing) at the high

**ENG050/051**

school level. Emphasis is on reading for comprehension. Students study the principles of vocabulary building. Speech activities involve experiences in critical listening and an introduction to public speaking. The literature unit includes non-fiction/short story, mythology, drama, poetry, and a novel. Literature, mythology, and speech activities will be designed to reflect an academy focus.

**NOTE:** This course provides credits that count toward the eight required English credits for graduation. This course counts in the RAI.

### **ELL English 10 A/B \***

**ENG054/055**

01-002-G-050-10 (A)

01-002-G-050-20 (B)

Open to 10-11-12

2 credits

This course is designed for the English Language Learner. ELL strategies and modifications are used to enhance understanding. This course further develops the student's appreciation and knowledge of literary genres, speaking skills, and writing competency. This course is an extension of the composition skills developed in English 9 and includes training in writing and revising full-length, multi-paragraph essays. Speech activities include expository speaking, recitation, and persuasion. The literary study includes a novel, selected nonfiction, poetry and short stories. Students will write a research paper regarding a self-chosen topic. Collaborative work, use of technology tools, and presentations are part of the learning process.

**NOTE:** This course provides credits that count toward the eight required English credits for graduation. This course counts in the RAI.

### **ELL American Literature/Composition A/B \***

**ENG032/033**

01-003-G-050-10 (A)

01-003-G-050-20 (B)

Open to 11-12

2 credits

This two-semester course is designed for the English Language Learner. ELL strategies and modifications are used to enhance understanding. Students will develop reading, writing, viewing, and thinking skills through the exploration of fiction, and nonfiction literature, including poetry and drama. The course provides a basic overview of the chronological development of literature in America. The writing component in the course will focus on common errors in grammar, usage, and mechanics within the context of essay writing as well as through daily practice. Students are expected to share their writing and critique the writing of others. Collaborative work, use of technology tools, and formal presentations are part of the learning process.

**NOTE:** This course provides credits that count toward the eight required English credits for graduation. This course counts in the RAI.

### **ELL Keyboarding**

**BUS020**

12-005-S-050-00

Open to 9-10-11-12

1 credit

This course is designed for the English Language Learner. ELL strategies and modifications are used to enhance understanding. Students are instructed in keyboarding techniques for the use of computers and technology. Keyboard mastery, efficient use of service mechanisms and speed and accuracy on straight copy are emphasized. Students are assessed initially for individualized placement based on prior keyboard knowledge. At the conclusion of this course, a second assessment will assist in determining further keyboard/computer coursework.

### **ELL C<sup>3</sup> Foundations**

**CAR005**

22-152-G-050-00

Open to 9

1 credit

This course is designed for the English Language Learner. ELL strategies and modifications are used to enhance understanding. **This is a required course for 9th grade students.** The Expanded Learning

Program, JROTC, ELL C<sup>3</sup> Foundations, and Strategies courses also meet the requirement for C<sup>3</sup> Foundations. It is highly recommended that very careful consideration be given prior to enrolling in one of these three courses that takes the place of C<sup>3</sup> Foundations.

The course includes 21st Century concepts and skills in the areas of career choices, employability, financial literacy and high school orientation. Students will match their interest and aptitudes to career options with a focus on using employment information effectively, acquiring and improving employability skills that allow people to gain, remain and advance in the workplace as well as in society. Students will use technology to enhance their class projects. Students will be expected to demonstrate money management and make informed, responsible financial decisions. Students will review and update their career plan and explore pathway options (liberal arts, CTE, and IB). Students will gain an understanding of working in a global society.

**NOTE:** This course counts for the required C<sup>3</sup> Foundations credit for graduation.

### **ELL Pre-Algebra A/B**

**MAT012/013**

02-051-S-050-00 (A)

02-051-S-050-00 (B)

Open to 9-10-11-12

2 credits

This course is designed specifically for the English Language Learner with limited experience in previous mathematics courses and/or with interrupted formal education. This course is not appropriate for ELL students who have had an 8th grade math course in a U.S. school or have evidence of receiving an 8th grade math/pre-algebra credit. ELL strategies and modifications are used to enhance understanding. Students will strengthen the fundamental skills needed to enroll in Algebra I. This course includes language of algebra, integers, solving multi-step equations and inequalities, ratio, proportion, percent, and basic operations using polynomials.

### **ELL Algebra I A/B**

**MAT018/019**

02-052-G-050-10 (A)

02-052-G-050-20 (B)

Open to 9-10-11-12

2 credits

ELL students will explore the following algebraic concepts: properties and operations of numerical and variable expressions, equation solving using equations to solve career context problems, performing operations with polynomials, systems of linear equations, solving inequalities, coordinating graphing of equations, factoring, radical expressions and equations containing radical expressions.

**NOTE:** This course counts towards the six math credits for graduation. This course counts in the RAI.

### **ELL Consumer Math I A/B**

**MAT020/021**

02-157-G-050-10 (A)

02-157-G-050-20 (B)

Open to 11-12

2 credits

This course is designed for the English Language Learner. ELL strategies and modifications are used to enhance understanding. Students will review basic computation and how it relates to consumer and career topics. In this course, students will review computation with whole numbers, fractions, decimals, and percents. They will use these skills to study gross earnings, personal finance such as checking accounts, borrowing and saving money, and consumer spending topics such as discounts, insurance, taxes, purchasing automobiles, travel, housing costs, installment purchases and bill paying. This is a study of mathematics needed for everyday adult living situations.

**NOTE:** This course counts towards the six math credits for graduation.

**ELL Health and Life Management**

08-057-G-050-00

Open to 10

Graduation requirement for the graduating class of 2016 and beyond -this class must be completed prior to graduation.

This course is designed for the English Language Learner. ELL strategies and modifications are used to enhance understanding. This course is designed to teach students to obtain, process, and understand basic health information and services needed to make appropriate health decisions throughout life. Students will understand basic health concepts to enhance personal, family and community health, develop literacy/skills and critical thinking/decision making skills related to personal health and wellness. They will learn to develop and demonstrate behaviors that foster healthy, active lifestyles. The class focuses on personal health topics and evaluation of consumer health information and advertising. Course objectives include helping students develop decision-making, communication, interpersonal, and coping skills and strategies. This class meets the requirements of the State of Iowa health literacy skills and CPR training.

**NOTE:** This course counts toward the one credit health requirement for graduation.

**PHE010**

1 credit

**ELL Physical Science A/B**

03-159-G-050-10 (A)

03-159-G-050-20 (B)

Open to 9-10-11-12

2 credits

This course is designed for the English Language Learner. ELL strategies and modifications are used to enhance understanding. This is an introductory level physics course designed around motion and energy. Students will investigate how objects are affected by the laws of motion, gravity, and forces. The students will design and evaluate a device that minimizes the effects of these forces on macroscopic objects. The students will also explore how energy is converted, transferred and conserved within a system. Finally, the students will investigate electromagnetic energy in the forms of electricity, magnetism, and light. This course will include some quantitative expressions at an Algebra I level.

**NOTE:** This course counts toward the six required science credits for graduation. This course counts in the RAI.

**SCI010/011****ELL Biology A/B**

03-051-G-050-10 (A)

03-051-G-050-20 (B)

Open to 10-11-12

2 credits

This course is designed for the English Language Learner. ELL strategies and modifications are used to enhance understanding. Students will conduct investigations and gather evidence to explain how organisms live and grow, how and why organisms interact with their environment, how characteristics of one generation are passed on to the next, and how members of the same species can have different characteristics. Students will construct explanations and use models to evaluate the evidence that shows how different species are related. Students will make and defend claims and analyze and interpret data in the context of biology core ideas.

**NOTE:** This course counts toward the six required science credits for graduation. This course counts in the RAI.

**SCI020/021****ELL Ecology A/B**

03-003-G-050-10 (A)

03-003-G-050-20 (B)

Open to 10-11-12

*Recommended: One year of science*

This course is designed for the English Language Learner. ELL strategies and modifications are used to enhance understanding. Students will develop an awareness of current environmental issues and the technologies for dealing with them. Topics such as solid and hazardous waste disposal, oil spill, wastewater treatment, and air pollution will be included. Examples of requirements include research and experiencing environmental issues through indoor and outdoor experiences, guest speakers, field trips, interactive activities, readings and projects. Class includes an independent research component.

**NOTE:** This course counts toward the six required science credits for graduation. This course counts in the RAI.

**SCI030/031**

2 credits

**ELL Earth and Space Science A/B**

03-008-G-050-10 (A)

03-008-G-050-20 (B)

Open to 9-10-11-12

2 credits

This course is designed for the English Language Learner. ELL Strategies and modifications are used to enhance understanding. The course will help students formulate an answer to these questions: "What is the universe, and what is Earth's place in it?" Topics include the universe and its stars, the solar system and the history of planet Earth. "How and why is Earth constantly changing?" Topics include earth materials and systems, plate tectonics, the roles of water on earth, weather, climate, and biogeology. "How do Earth's surface processes and human activities affect each other?" Topics include natural resources and hazards, humanity's impact on Earth systems, and global climate change. This course blends these core ideas with scientific and engineering practices to support students in developing usable knowledge to explain ideas across the science disciplines.

**NOTE:** This course counts toward the six required science credits for graduation. This course counts in the RAI.

**SCI035/036****ELL U.S. History A/B**

04-103-G-050-10 (A)

04-103-G-050-20 (B)

Open to 9-10-11-12

2 credits

This course is designed for the English Language Learner. ELL strategies and modifications are used to enhance understanding. Students will study political, cultural and social history and understand how that has determined the present. Studying key people and events, and American life, will be the basis for understanding connections between diverse peoples. Focus will be on the turning points in history and events that have lasting impact on our contemporary lives. First semester covers Reconstruction to New Deal. Second semester covers WWII to 1975. The course will infuse career oriented activities and students will engage in the standards of the Iowa Core Curriculum.

**NOTE:** This course counts toward the US History graduation requirement. This course counts in the RAI.

**SOC010/011**

**ELL U.S. Government****SOC020**

04-151-G-050-00

Open to 11-12

1 credit

This course is designed for the English Language Learner. ELL strategies and modifications are used to enhance understanding. Students will learn the concepts of our national, state, and local governments. They will be guided in developing an appropriate sense of responsible citizenship as participants in our democratic society. Topics covered include all branches of government and the interrelatedness of their functions and experiences to show students how government affects their daily life and how they can affect government. The course will infuse career oriented activities and students will engage in the standards of the Iowa Core Curriculum.

**NOTE:** This course counts toward the US Government graduation requirement. This course counts in the RAI.

**ELL World History A/B****SOC030/031**

04-051-G-050-10 (A)

04-051-G-050-20 (B)

Open to 10-11-12

2 credits

This course is designed for the English Language Learner. ELL strategies and modifications are used to enhance understanding. Students will study cultural areas of the world from a chronological perspective. They will relate historical and geographical information to contemporary situations. World History A covers ancient civilizations through the Middle Ages. World History B covers the French Revolution through the Russian Revolution. The course will infuse career oriented activities and students will engage in the standards of the Iowa Core Curriculum.

**NOTE:** This course counts toward the World History graduation requirement. This course counts in the RAI.

**ELL Economics****SOC025**

04-201-G-050-00

Open to 10-11-12

1 credit

This course is designed for the English Language Learner. ELL strategies and modifications are used to enhance understanding. Students will learn concepts such as supply and demand, market pricing and government intervention, and be able to relate them to social issues pertinent to their personal lives. The course will cover the history of economics and geopolitical studies.

**NOTE:** This course counts toward the Economics graduation requirement. This course counts in the RAI.

**ELL Contemporary Affairs****SOC040**

04-156-G-050-00

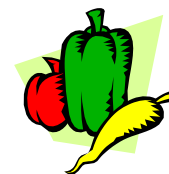
Open to 11-12

1 credit

This course is designed for the English Language Learner. ELL strategies and modifications are used to enhance understanding. Students will study current world events and issues from the United States' perspective. Students will critically analyze background information and events leading to the event/issue and will also consider the geographic influences and multiple perspectives impacting the event/issue. Students will engage in discussions and generate possible outcomes/solutions regarding current world events/issues. The course will have a unit on careers related to social studies.

**NOTE:** This course counts toward the Contemporary Affairs graduation requirement. This course counts in the RAI.

# Human Services



	Course Title	9	10	11	12		Credits	Recommended Prerequisite
HUM120	Exploring Career in Human Services	X	X	X	X		1	
FCS229	Child Development	X	X	X	X		1	
FCS220	Beginning Personal Finance		X	X	X		1	
CAR334	Educational Technology in the Classroom			X	X		1	
CAR336	Exploring PK-12 Education*			X	X		1	Yes
FCS322	Teacher Internship				X			
FCS215	ProStart Culinary Arts I		X	X	X		2	Yes
FCS315	ProStart Culinary Arts II		X	X	X		2	Yes
FCS400	Introduction to Hospitality *		X	X	X		1	Yes
FCS401	Introduction to Restaurant Management		X	X	X		1	Yes
FCS323	Culinary Arts Internship				X			
LEA206/207	Peer Tutor A/B		X	X	X		1	Yes
LEA410/411	Teacher Assistant A/B			X	X		1	Yes
FCS065/066 FCS075/076	Personal & Social Development I, II A/B	X	X	X	X		2	
LCC126/127 LCC226/227	Extended Core Personal & Social Relationships I, II A/B	X	X	X	X		2	

All courses emphasize 21st century skills and literacy development. Instruction is differentiated to meet the needs of all students.

## Exploring Careers in Human Services

22-250-G-050-30

Open to 9-10-11-12

## **HUM120**

1 credit

This course is an introduction to hospitality, finance, human services, and education. Students will become familiar with the management, marketing and operations of restaurants and other food services, and lodging. The management of personal finances, early childhood education and training services are explored. Preparing individuals for employment in career pathways that relate to families and human needs will be included.

## Child Development

19-052-G-050-00

Open to 9-10-11-12

## **FCS229**

1 credit

This course explores children's development in the areas of cognitive, social, emotional, and physical aspects from prenatal to age three. Topics included are: prenatal, birth, health, safety, parenting, and choosing childcare.

## Beginning Personal Finance

19-262-G-050-00

Open to 10-11-12

## **FCS220**

1 credit

Students will study and apply economic principles in decision making for individual, family and community. Students will study economics on a national and personal level. Included topics are inflation, taxation, supply and demand and the government's role in economics. **This course counts as an economics credit.**

## Educational Technology in the Classroom

19-155-G-050-00

Open to 11-12

## **CAR334**

1 credit

This course prepares students to integrate technology into their teaching curriculum. It will enable students to design educational and training materials while incorporating instructional technology. Students will explore a variety of technologies, including the computer, Internet, multimedia, graphics, audio, and text with an emphasis on increasing learning through their use. Students will also examine combining technology with a variety of instructional methods.

## Exploring PK-12 Education

19-151-C-050-00

Open to 11-12

Hawkeye Community College EDU214

## **CAR336**

1 credit

2 credits

*Prerequisites: approval process*

This course is designed to give students the opportunity to gain insight into the teaching profession and examine what it means to be a PK-12 teacher. Students will critically evaluate teaching as their chosen or possible profession. An overview of the skills and knowledge they will need to be successful professionals will be investigated. Current and future trends in public education will be examined.

**Teacher Internship**

19-198-G-050-00

Open to 12

**FCS322**

1 credit

Seniors in the Consumer Services Pathway have the opportunity to work with a professional in their desired profession. Interns spend 8 to 20 hours a week at their internship site completing work assignments, attending meetings, and developing special projects requested by the sponsor. The intern has the opportunity to make contributions to the organization while achieving personal, academic, and career growth. Interns can schedule classes and still participate in an internship experience on a part-time basis. Interns spend the first three weeks of the semester attending classes as part of the internship. Once students begin their internship, they meet once a week to share and reflect on their experiences. Curriculum for the seminars includes career development, communication skills, problem solving, leadership, and decision-making skills integrated with technology. Interns participate in self-assessments and pursue personalized learning plans. Technology is used to assist students in creating polished presentations and the computer lab is utilized for all assignments.

**Culinary Arts Pathway**

Culinary Arts is a three year program designed to prepare students for careers in culinary arts and food service management. Students who successfully complete the program, pass the level 1 and level 2 national certified tests and have 400 hours of approved work experience can receive the National Certificate of Achievement and get 12 hours towards an academic program that is articulated with this program. Students will be prepared to enter the job market after graduation or continue in college. Classroom studies will be combined with lab experiences. Local restaurant and food service personnel will act as mentors. Pathway includes ProStart Culinary Arts I, II, and Catering and Restaurant Management. Students should be proficient in reading and Math.

**ProStart Culinary Arts I**

16-056-G-100-10

Open to 10-11-12

**FCS215**

2 credits

Topics include keeping food safe, workplace safety, understanding standard recipes, equipment and techniques, sauces, and soups, fruits and vegetables, potatoes and grains, customer service and building a successful career in the industry. This is a double blocked one semester course.

**ProStart Culinary Arts II**

16-056-G-100-20

Open to 10-11-12

**FCS315**

2 credits

*Follows ProStart Culinary Arts I*

Units include breakfast food and sandwiches, nutrition, cost control, salads and garnishes, purchasing and inventory, meat, poultry, seafood, marketing, desserts and baked goods, the restaurant and food service industry, and global cuisine. Students may also be eligible for a co-op position in their senior year. This is a double blocked one semester course.

**Introduction to Hospitality**

16-055-C-050-00

Open to 10-11-12

Hawkeye Community College HCM608

**FCS400**

1 credit

3 credits

*Recommended to follow successfully completed ProStart Culinary Arts I & II, completed application and teacher approval*

Introduction to the food service, lodging, and tourism components of the hospitality industry. Background information, current issues, resume writing, and future challenges in various segments of the industry

**Introduction to Restaurant Management**

16-055-G-050-00

Open to 10-11-12

**FCS401**

1 credit

*Recommended to follow successfully completed ProStart Culinary Arts I & II, completed application and teacher approval*

Students will develop essential skills necessary to begin a career in the restaurant and food industry. This course will cover topics such as: restaurant basics for both the front and back of the house, banquet and dining room layout, managing restaurant operations from staff to purchasing, challenges that today's restaurants face, and trends within the current market.

**Culinary Arts Internship**

16-098-G-050-00

Open to 12

**FCS323**

1 credit

Seniors in the Hospitality and Tourism Pathway have the opportunity to work with a professional in their desired profession. Interns spend 8 to 20 hours a week at their internship site completing work assignments, attending meetings, and developing special projects requested by the sponsor. The intern has the opportunity to make contributions to the organization while achieving personal, academic, and career growth. Interns can schedule classes and still participate in an internship experience on a part-time basis. Interns spend the first three weeks of the semester attending classes as part of the internship. Once students begin their internship, they meet once a week to share and reflect on their experiences. Curriculum for the seminars includes career development, communication skills, problem solving, leadership, and decision-making skills integrated with technology. Interns participate in self-assessments and pursue technology. Interns participate in self-assessments and pursue personalized learning plans. Technology is used to assist students in creating polished presentations and the computer lab is utilized for all assignments.

**Peer Tutor A/B**

22-054-G-050-10

22-054-G-050-20

Open to 10-11-12

**LEA206/207**

1 credit

*Recommended: Counselor approval, teacher approval, and must meet requirements on building approved form*

In this course students will have the opportunity to work as a tutor under the supervision of a high school teacher. They will assist assigned students in completion of assigned work and in subject matter help. Students must have earned an A or B grade in a previous course in the content area in which they will be tutoring. It is the supervising teacher's responsibility to provide the work area, assigned work, and any other aid needed. Students will work one period per day. This is a pass/no credit course and the supervising teacher is responsible for turning in the grade.

**Teacher Assistant A/B****LEA410/411**

19-151-G-050-10

19-151-G-050-20

Open to 11-12

1 credit

*Counselor approval, teacher approval and must meet requirements on building approved form*

In this course students will have the opportunity to work as an assistant to a high school teacher. They will assist the teacher in assigned duties including, but not limited to, working with individual students, working with small groups of students, making teaching aids or utilizing special talents. Students will work one period per day. This is a pass/no credit course and the supervising teacher is responsible for turning in the grade.

**Personal & Social Development A/B**

19-260-S-050-00 (A)

**FCS065/066**

19-260-S-050-00 (B)

19-260-S-050-00 (A)

**FCS075/076**

19-260-S-050-00 (B)

Open to 9-10-11-12

2 credits

In this course students will learn character and leadership traits by developing critical-thinking skills, applying inter-personal skills, positive work habits, and job skills. Students will also focus on communication and study skills to improve academic achievement and hone employability skills for post-secondary success.

Participation in Life Centered Curriculum Courses is determined through an IEP team decision. The Course of Study within the IEP defines graduation requirements based on individual needs.

**Extended Core Personal & Social Relationships I, II A/B**

19-260-S-050-00 (A)

**LCC126/127**

19-260-S-050-00 (B)

19-260-S-050-00 (A)

**LCC226/227**

19-260-S-050-00 (B)

Open to 9-10-11-12

2 credits

In this series of courses students will learn various options for personal recreation and leisure for home, school, and the community. In these courses students will utilize personal preference to make decisions regarding their personal time. Skills included in this course may include organizing, initiating, and participating in leisure activities. Students will engage in activities independently or in a group setting. Social skills will be a regular part of these courses.

# Industrial Technology

	Course Title	9	10	11	12		Credits	Recommended Prerequisite
IND100	Introduction to Technology	X	X				1	
IND101	Mechanical Drafting-Computer Aid Drafting		X	X	X		1	
IND102	Architectural Drafting-Computer Aid Drafting		X	X	X		1	
IND105	Intro to Metals in Manufacturing	X	X	X	X		1	
	Construction Series							
IND220	Introduction to Residential Construction *		X	X	X		2	
IND350	Intro to Finish Carpentry			X	X		1	
IND206	Construction Technology II			X	X		2	
	Construction Internship				X			
	Manufacturing							
IND344	Intro to Machine Operations		X	X	X		1	
IND345	Understanding Machining Theory		X	X	X		1	
IND215	CAD I *		X	X	X			Yes
IND336	Manufacturing Internship				X			
	Automotive I Series							
IND330	Introduction to Automotive Technology *		X	X	X		1	
IND333	Introduction to Automotive Technology II *		X	X	X		1	Yes
IND319	Brake Systems (Qtr 3)		X	X	X		1	
IND329	Brake Systems II (Qtr 4)		X	X	X		1	
	Automotive II Series							
IND335	Intro to Automotive Electrical I (Qtr 1)		X	X	X		1	
IND337	Fuel Systems (Qtr 2)		X	X	X		1	
IND339	Vehicle Engine Repair (Qtr 3,4)		X	X	X		2	
	Automotive III Series							
IND341	Intro to Automotive Heating and Cooling			X	X		2	
IND338	Automotive Maintenance Internship				X			Yes
	Engineering Pathway (PLTW)							
CAR450/451	PLTW Introduction to Engineering Design A/B *	X	X	X	X		2	Yes
CAR460/461	PLTW Principles of Engineering A/B *		X	X	X		2	Yes
CAR324/325	PLTW Digital Electronics A/B *		X	X	X		2	Yes
CAR483	Computer Integrated Manufacturing *			X	X		2	Yes
CAR484	Engineering Design & Development *			X	X		2	Yes
CAR329	Engineering Internship				X			

\* Concurrent courses with Hawkeye Community College must meet entrance requirements.

All courses emphasize 21st century skills and literacy development. Instruction is differentiated to meet the needs of all students. The special education service delivery plan outlines services available for students with an Individualized Education Program (IEP).



**Introduction to Technology**

13-003-G-050-00

Open to 9-10

**IND100**

1 credit

Students will understand the basic processes of industrial technology (how things are made and how they work) and career choices. Possible topics covered are woods, metals, mechanical drawing, power and energy, small engines, tools, welding, foundry and machines. This is a 'hands-on' class where students gain an understanding of their interests and abilities in the industrial technologies.

**Mechanical Drafting - Computer Aid Drafting**

21-106-G-050-00

Open to 10-11-12

**IND101**

1 credit

Students will become familiar with reading and producing drawings and illustrations used to communicate within and between industries. Topics covered are multi-view drawing, dimensioning, section views, geometric construction and blueprint reading.

**Architectural Drafting-Computer Aid Drafting**

21-103-G-050-00

Open to 10-11-12

**IND102**

1 credit

Using CAD, students will learn how to design and draw a complete set of working drawings for a house. Topics covered are introduction to CAD systems, basic house design and construction, room design, and blueprint reading.

**Intro to Metals in Manufacturing**

13-202-G-050-00

Open to 9-10-11-12

**ND105**

1 credit

In this course, students will learn about fabrication, welding, metal casting and machining and the various processes used in each area. The purpose of the class is to enhance interest in various areas of Adv. Manufacturing.

**Construction Series****Introduction to Residential Construction**

17-002-C-100-00

Open to 10-11-12

**IND220**

2 credits

Hawkeye Community College CON102

2 credits

Students will be introduced to basic residential construction safety, history, terminology, materials, and basic construction techniques. This course will cover basic information and develop manual skills needed to begin construction of a new home. This course is a double blocked semester long course.

**Introduction to Finish Carpentry**

17-003-G-050-00

Open to 11-12

**IND350**

1 credit

*Recommended: Intro to Residential Construction*

In this course, students will learn what finish carpentry is and how it is used in the field of residential construction. Students will learn and demonstrate the processes used in the manufacturing and installation of cabinetry and mill work in residential construction. The purpose of this class is to enhance interest in Construction Technology II.

**Construction Technology II**

17-002-G-100-20

Open to 11-12

**IND206**

2 credits

*Recommended: Intro to Residential Construction and Intro to Finish Carpentry*

Students will gain basic knowledge of acceptable construction methods and practices used in the design and installation of components and systems within residential and commercial structures. Project based activities will be provided in the areas of: exterior sheathing and wrapping, siding installation, window and door installation, electrical systems, plumbing systems, drywall installation, drywall finishing/repair, trim installation, flooring, cabinet installation and HVAC systems. Each student will be required to demonstrate skills in proper tool handling and maintenance as well as the safe operation of various pieces of construction equipment, hand and power tools. This course is a double blocked semester long course.

**Construction Internship**

17-998-G-050-00

Open to 12

**IND**

1 credit

Seniors in the Architectural and Construction Pathway have the opportunity to work with a professional in their desired profession. Interns spend 8 to 20 hours a week at their internship site completing work assignments, attending meetings, and developing special projects requested by the sponsor. The intern has the opportunity to make contributions to the organization while achieving personal, academic, and career growth. Interns can schedule classes and still participate in an internship experience on a part-time basis. Interns spend the first three weeks of the semester attending classes as part of the internship. Once students begin their internship, they meet once a week to share and reflect on their experiences. Curriculum for the seminars includes career development, communication skills, problem solving, leadership, and decision-making skills integrated with technology. Interns participate in self-assessments and pursue personalized learning plans. Technology is used to assist students in creating polished presentations and the computer lab is utilized for all assignments.

**Manufacturing:**

Intro to Machine Operations  
Understanding Machining Theory  
CAD I

**Intro to Machine Operations**

13-999-G-050-00

Open to 10-11-12

**IND344**

1 credit

This course will teach students to identify the major parts of the vertical mill, align a vise, use an indicator, edge finder and boring head; determine speeds and feeds, perform simple indexing, mill flat, square surfaces and slots; drill, bore, and tap holes; and work within a plus or minus .002 inch tolerance.

## **Understanding Machining Theory**

13-203-G-050-00

Open to 10-11-12

**IND345**

1 credit

Students will be introduced to the changing era of machining technology, emphasizing terminology, referencing and applications related to manufacturing environments. Also the fundamental use of bench tools, layout procedures, materials, precision measuring tools, machining processes, drilling and cut-off machines and other machining/manufacturing processes will be stressed. Skill competencies and standards will be identified. Use of the Machinery's Handbook will be strictly required and particular competencies may require performance evaluations.

## **CAD I**

21-107-C-050-00

Open to 10-11-12

**IND215**

Hawkeye Community College CAD105

*Prerequisites: Must meet HCC requirements*

This course introduces and provides the student an opportunity for hands-on experience in computer-aided drafting (CAD) to prepare two-dimensional drawings. Students focus on the architecture of computer systems, terminology, disk operating systems and procedures, and basic CAD drafting commands.

## **Manufacturing Internship**

13-998-G-050-00

Open to 12

**IND 336**

1 credit

Seniors in the STEM Engineering, Industrial & Technology Services Pathway have the opportunity to work with a professional in their desired profession. Interns spend 8 to 20 hours a week at their internship site completing work assignments, attending meetings, and developing special projects requested by the sponsor. The intern has the opportunity to make contributions to the organization while achieving personal, academic, and career growth. Interns can schedule classes and still participate in an internship experience on a part-time basis. Interns spend the first three weeks of the semester attending classes as part of the internship. Once students begin their internship, they meet once a week to share and reflect on their experiences. Curriculum for the seminars includes career development, communication skills, problem solving, leadership, and decision-making skills integrated with technology. Interns participate in self-assessments and pursue personalized learning plans. Technology is used to assist students in creating polished presentations and the computer lab is utilized for all assignments.

### **Automotive I Series:**

Introduction to Automotive Technology  
Introduction to Automotive Technology II  
Brake Systems  
Brake Systems II

*This series of courses is taken across  
2 semesters.*

4 WCSD credits / TBD HCC credits

The following courses are bundled together as a year long series and blocked in the student's schedule in order to fulfill 288 hours of contact time in the Automotive classes.

### **Introduction to Automotive Technology (Qtr 1) IND330**

20-103-C-050-10

Open to 10-11-12

1 credit

Hawkeye Community College AUT106

2 credits

This introductory course provides an introduction to the many facets of the automotive industry to include: careers in the automotive industry, environmental concerns affecting the automotive industry, basic automotive hand tools, specialty tools, precision measuring tools, power tools and shop equipment, using service and shop manuals, and shop safety.

### **Intro to Automotive Technology II (Qtr 2) IND333**

20-103-C-050-20

Open to 10-11-12

1 credit

Hawkeye Community College AUT109

2 credits

This course includes the use of hand and power tools, the understanding of electronic repair information and the importance of preventative maintenance.

### **Brake Systems (Qtr 3) IND319**

20-105-G-050-11

Open to 10-11-12

1 credit

This course will cover basic operation of automotive braking systems. This includes operation, diagnosis and basic repair of disc, drum and basic hydraulic braking systems.

### **Brake Systems II (Qtr 4) IND329**

20-105-G-050-21

Open to 10-11-12

1 credit

This course will teach the skills to perform service checks and procedures to automotive foundation braking system and to identify components and types of ABS and traction control systems.

### **Automotive II Series:**

Intro to Automotive Electrical I

Fuel Systems

Vehicle Engine Repair

*This series of courses is taken across  
2 semesters.*

**Recommended: completion of Automotive I  
Series**

The following courses are bundled together as a year long series and blocked in the student's schedule in order to fulfill 270 hours of contact time in the Automotive classes.

#### **Intro to Automotive Electrical I (Qtr 1) IND335**

20-105-G-050-12

Open to 10-11-12

1 credit

Students will be introduced to vehicle electricity and basic electrical theory, circuit designs, and wiring methods. This course also focuses on multimeter usage and wiring diagrams.

#### **Fuel Systems (Qtr 2) IND337**

20-105-G-050-22

Open to 10-11-12

1 credit

This course will focus on lecture and laboratory experiences in the diagnosis and repair of automotive fuel emission control systems, filter systems and spark plugs.

#### **Vehicle Engine Repair (Qtr 3,4) IND339**

20-104-G-100-00

Open to 10-11-12

2 credits

*Recommended: Intro to Auto Electrical I and Fuel Systems*

This course will focus on lecture and laboratory experiences in the service of cylinder head, valve-train components and components of the cooling system. This course also includes engine removal and re-installation and re-mounting systems.

### **Automotive III Series**

#### **Intro to Automotive Heating and Cooling IND341**

20-105-G-050-13

Open to 11-12

2 credits

This course will cover basic operation of the heating and air conditioning components of vehicles.

#### **Automotive Maintenance Internship IND338**

20-148-G-050-00

Open to 12

1 credit

Seniors in the Transportation, Distribution and Logistics Pathway have the opportunity to work with a professional in their desired profession. Interns spend 8 to 20 hours a week at their internship site completing work assignments, attending meetings, and developing special projects requested by the sponsor. The intern has the opportunity to make contributions to the organization while achieving personal, academic, and career growth. Interns can schedule classes and still participate in an internship experience on a part-time basis. Interns spend the first three weeks of the semester attending classes as part of the internship. Once students begin their internship, they meet once a week to share and reflect on their experiences. Curriculum for the seminars includes career development, communication skills, problem solving,

leadership, and decision-making skills integrated with technology. Interns participate in self-assessments and pursue personalized learning plans. Technology is used to assist students in creating polished presentations and the computer lab is utilized for all assignments.

### **Project Lead the Way Engineering Courses**

#### **PLTW Introduction to Engineering Design A/B**

**CAR450/451**

21-017-C-050-10 (A)

21-017-C-050-20 (B)

Open to 9-10-11-12

2 credits

Hawkeye Community College EGT400

3 credits

*Prerequisites: approval process*

This is one of several courses that provide students the opportunity to explore engineering and other technology-based careers prior to college. In addition, students have the opportunity to learn science, math, and technology in a hands-on, relevant way. In this course, using 3-D computer modeling software, students learn the design process, and they solve design problems as they develop, analyze, and create product models. Projects help teach students how to communicate effectively and work as a team. Near the end of the course, students will have the opportunity to complete an assessment that, along with classroom proven success, will transfer to a credit at the college level. This course is based on Project Lead the Way curriculum.

#### **PLTW Principles of Engineering A/B**

**CAR460/461**

21-018-C-050-10 (A)

21-018-C-050-20 (B)

Open to 10-11-12

2 credits

Hawkeye Community College EGT410

3 credits

*Prerequisite: Introduction to Engineering Design*

This is the second course in a series of Project Lead the Way (PLTW) courses in the engineering cluster. This course helps students understand the field of engineering/engineering technology. Exploring various technology systems and manufacturing processes help students learn how engineers and technicians use math, science, and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change. Near the end of the course, students will have the opportunity to complete an assessment that, along with classroom proven success, will transfer to a credit at the college level.

**PLTW Digital Electronics A/B****CAR324/325**

21-023-C-050-10 (A)

21-023-C-050-20 (B)

Open to 10-11-12

2 credits

Hawkeye Community College EGT420

3 credits

*Prerequisites: Introduction to Engineering Design OR Electronic Communications; recommended - completion of Algebra II or taken concurrently*

This is the third foundational course in the Project Lead the Way (PLTW) engineering cluster. Digital Electronics is a course in applied logic that encompasses the application of electronic circuits and devices. Computer simulation software is used to design and test digital circuitry prior to the actual construction of circuits and devices. Near the end of the course, students will have the opportunity to complete an assessment that, along with classroom proven success, will lead to credit at the college level.

**Computer Integrated Manufacturing****CAR483**

21-010-C-050-00

Open to 11-12

2 credits

Hawkeye Community College EGT450

3 credits

*Prerequisites: approval process*

This course enhances computer modeling skills by applying principles of robotics and manufacturing automation to the creation of models of three dimensional designs. This course is based on Project Lead the Way curriculum. This course is available only at the HCC campus.

**Engineering Design & Development****CAR484**

21-007-C-050-00

Open to 11-12

2 credits

Hawkeye Community College EGT470

3 credits

*Prerequisites: approval process*

This course is a research course that requires students to formulate the solution to an open-ending engineering question. With a community mentor and skills gained in their previous courses, students create written reports on their applications, defend the reports, and submit them to a panel of outside reviewers. This course is based on Project Lead the Way curriculum. This course is available only at the HCC campus.

**Engineering Internship****CAR329**

21-048-G-050-00

Open to 12

1 credit

Seniors in the STEM Engineering, Industrial and Technology Services Pathway have the opportunity to work with a professional in their desired profession. Interns spend 8 to 20 hours a week at their internship site completing work assignments, attending meetings, and developing special projects requested by the sponsor. The intern has the opportunity to make contributions to the organization while achieving personal, academic, and career growth. Interns can schedule classes and still participate in an internship experience on a part-time basis. Interns spend the first three weeks of the semester attending classes as part of the internship. Once students begin their internship, they meet once a week to share and reflect on their experiences. Curriculum for the seminars includes career development, communication skills, problem solving, leadership, and decision-making skills integrated with technology. Interns participate in self-assessments and pursue personalized learning plans. Technology is used to assist students in creating polished presentations and the computer lab is utilized for all assignments.

# Junior Reserve Officer Training Corps

## JROTC

	Course Title	9	10	11	12		Credits	Recommended Prerequisite
	<b>ARMY</b> (at East High)							
ARR100/101	LET #1 A/B	X	X	X	X		2	
ARR200/201	LET #2 A/B		X	X	X		2	Yes
ARR300/301	LET #3 A/B			X	X		2	Yes
ARR400/401	LET #4 A/B				X		2	Yes
	<b>AIR FORCE</b> (at West High)							
AFR100/101	AFJROTC First Year A/B	X	X	X	X		2	
AFR200/201	AFJROTC Second Year A/B		X	X	X		2	Yes
AFR300/301	AFJROTC Third Year A/B			X	X		2	Yes
AFR400/401	AFJROTC Fourth Year A/B				X		2	Yes
AFR406/407	AFJROTC Drill and Ceremony	X	X	X	X		2	

All courses emphasize 21st century skills and literacy development. Instruction is differentiated to meet the needs of all students. The special education service delivery plan outlines services available for students with an Individualized Education Program (IEP).

### **ARMY JROTC**

(offered at East High)

Open to 9-10-11-12

*Recommended: U.S. citizen or in the process of becoming a U.S. citizen*

The mission of Army Junior ROTC is to motivate young people through mentoring citizenship, morals, self-discipline and leadership, and ethics and behavior. Cadets enrolled in Army JROTC are expected to uphold the highest standards of conduct in and out of school.

Cadets will be required to participate in drill and ceremonies, physical training, classroom instruction, after school or summer military activities and wear a uniform one day per week. Students who do not wear their uniform three times in a semester will be dropped from the program.

The complete course of instruction covers a number of distinct areas: career, college, communication, citizenship and safety.

**Important Note:** Students must pass each semester of the Army JROTC program to be able to move on to the next semester and remain in the program.

#### **First Year (LET 1)**

09-051-G-050-10 (A)

09-051-G-050-20 (B)

Open to 9-10-11-12

**ARR100/101**

2 credits

Title: Introduction to Leadership Education and Training Class includes leadership theory, drill and ceremonies, hygiene, first aid, maps, citizenship, safety and techniques of oral communication.

#### **Second Year (LET 2)**

09-052-G-050-10 (A)

09-052-G-050-20 (B)

Open to 10-11-12

*Recommended: Let 1*

Title: Intermediate Leadership Education and Training.

Class work includes intermediate leadership skills, drill and ceremonies, techniques of oral communication, citizenship, map reading, Service/Senior ROTC opportunities and first aid.

**ARR200/201**

2 credits

#### **Third Year (LET 3)**

09-053-G-050-10 (A)

09-053-G-050-20 (B)

Open to 11-12

*Recommended: Let 2*

Title: Applied Leadership Education and Training.

Class work includes leadership application and philosophy, drill and ceremonies, advanced techniques of oral communication, written communications, land navigation, citizenship and the role of the Army.

**ARR300/301**

2 credits

#### **Fourth Year (LET 4)**

09-054-G-050-10 (A)

09-054-G-050-20 (B)

Open to 12

*Recommended: Let 3*

Title: Advanced Leadership Education and Training

Class work is controlled, self-paced work in the normal classroom with advanced leadership techniques, psychology of leadership, personnel and time management, drill and ceremonies, staff functions and procedures being taught by the SAI/AI in addition to the textbook work.

**ARR400/401**

2 credits

## **AIR FORCE JROTC**

(offered at West High)

Open to 9-10-11-12

*Recommended: U.S. citizen or in the process of becoming a U.S. citizen*

Air Force Junior ROTC is a citizenship program for high school students in the ninth through twelfth grades. AFJROTC encourages its students to get involved in their local communities to produce well-informed and helpful citizens. Cadets will have the opportunity to get involved in social activities, attend field trips, and participate on competition teams such as Drill Team.

Students who participated in AFJROTC are in no way obligated to join the military. However, qualified AFJROTC cadets are eligible for advanced rank and pay grade upon enlistment in the service, should they choose to do so. College scholarship opportunities are available for suitable AFJROTC candidates who wish to pursue a college education. Cadets who qualify may also be nominated to attend one of the service academies. Program graduates will have developed proven leadership and management skills and values that will enhance their ability to perform in academic and employment arenas.

Students are expected to wear the Air Force uniform once a week and meet all grooming standards including hair cuts for male students.

Course content is a blend of Aerospace Science (AS), Leadership Education (LE), and the Wellness Program.

In the area of Aerospace Science (AS) the overall objectives for the academic courses are for the cadet to develop:

- a. An appreciation of the basic elements and requirements for national security.
- b. Respect for and an understanding of the need for constituted authority in a democratic society.
- c. Patriotism and an understanding of their personal obligation to contribute toward national security.
- d. Broad-based knowledge of the aerospace age and fundamental aerospace doctrine.
- e. An interest in completing high school and pursuing higher educational goals or skills.
- f. An understanding of the Air Force and military as a possible career path.

Leadership Education (LE) is an integral part of each year's instruction for AFJROTC cadets. Each year's activities are broken into Academic and Leadership components. In practice, however, the overlap is considerable. The development of writing and speaking skills are categorized as "Leadership Hours," yet when used to present subject matter related to what is being taught in the "academic" area, the results are twofold. Additionally, many after-school activities provide the proving ground for newly learned leadership skills. Activities such as drill teams, model rocketry clubs, and the formal cadet corps' operation all require offices with considerable responsibilities. To describe the leadership portion of the curriculum as being 288 hours (72 hours per year) is technically true; in practice it is highly understated.

## **First Year (AS/LE-10X)**

09-151-G-050-10 (A)

09-151-G-050-20 (B)

**AFR100/101**

2 credits

### **AS-100: A Journey into Aviation History**

This is the recommended first AS component for all new cadets. It is an aviation history course focusing on the development of flight throughout the centuries. It starts with ancient civilizations, then progresses through time to modern day. The emphasis is on civilian and military contributions to aviation; the development, modernization, and transformation of the Air Force; and a brief astronomical and space exploration history. It is interspersed with concise overviews of the principles of flight to include basic aeronautics, aircraft motion and control, flight power, and rockets. Throughout the course, there are readings, videos, hands-on activities, and in-text and student workbook exercises to guide in the reinforcement of the materials.

### **LE-100: Traditions, Wellness, and Foundations of Citizenship**

LE-100 is the component of JROTC leadership education. It will introduce cadets to history, organization, mission, traditions, goals, and objectives of JROTC for all services. It introduces key military customs and courtesies, how to project a positive attitude, and examine the principles of ethical and moral behavior. It provides strategies for effective note taking and study skills for academic success. Lessons will cover how to be emotionally, mentally, and physically healthy. Avoiding and preventing violence in today's society will also be covered. How to recognize types of bullying and how to advocate for prevention of this type of behavior. It will cover healthy living, physical fitness, and how to make safe, drug-free, and responsible decisions. The textbook will also examine the negative effects of air and water pollution, and how to help keep the environment safe. Cadets will be introduced to civics and our national government, including a historical understanding of the American flag and other important national symbols. The final chapter will also cover how the US Constitution protects our rights and freedoms as American citizens.

## **Second Year (AS/LE-20X)**

09-152-G-050-10 (A)

09-152-G-050-20 (B)

**AFR200/201**

2 credits

*Recommended: Successful completion of first year*

### **AS-200: The Science of Flight: A Gateway to New Horizons**

*The Science of Flight: A Gateway to New Horizons* is an introductory course and customized textbook that focuses on how airplanes fly, how weather conditions affect flight, flight and the human body, and flight navigation. The course is designed to complement materials taught in math, physics, and other science-related courses and is aligned with the National Science Education Standards, the Math Standards and Expectations, and ISTE National Educational Technology Standards for Students.

In this course, every lesson includes a "Quick Write" and a short story related to the lesson; a "Learn About" that tells students what they'll learn from the lesson; a list of vocabulary words in the lesson; "Wing Tips" that highlight specific and interesting facts; and many biographies and profiles. Each lesson closes with "Checkpoints" that will allow students to review what they have learned. An "Applying Your Learning" section at the end of each lesson presents discussion questions that will give them a chance to use what they have

learned and provides another way to reinforce their understanding of the lesson's content. The text has four chapters, each of which contains a number of lessons.

### **LE-200: Communication, Awareness, and Leadership**

LE-200 hours stress communications skills and cadet corps activities. Much information is provided on communicating effectively, understanding groups and teams, preparing for leadership, solving conflicts and problems, and personal development. Written reports and speeches compliment the academic materials. Cadet corps activities include holding positions of greater responsibility in the planning and execution of corps projects.

### **Third Year (AS/LE-30X)**

09-153-G-050-10 (A)

09-153-G-050-20 (B)

*Recommended: Successful completion of second year*

### **AFR300/301**

2 credits

### **AS-220: An Introduction to Global Awareness**

This course introduces students to the world's cultures through the study of world affairs, regional studies, and cultural awareness. It delves into history, geography, religions, languages, culture, political systems, economics, social issues, environmental concerns, and human rights. It looks at major events and significant figures that have shaped each region. Throughout the course, there are readings, video segments, hands-on activities, other optional activities, technology enrichment, and assessments to guide in the reinforcement of the materials.

### **LE-300: Life Skills and Career Opportunities**

Life Skills and Career Opportunities, Second Edition provides an essential component of leadership education for today's high school students. This course is designed to prepare students for life after high school in the high-tech, globally oriented, and diverse workplace of the 21st Century.

Students will learn how to become a more confident financial planner and to save, invest, and spend money wisely, as well as how to avoid the credit trap. They will learn about real-life issues such as understanding contracts, leases, warranties, legal notices, personal bills, practical and money-saving strategies for grocery shopping, apartment selection, and life with roommates. The Holland Interest Inventory and other self-assessments will help them to reveal their attitudes, aptitudes, and personal skills. This self-understanding will allow them to explore career paths and understand requirements that they will need to be successful at work and in life.

To help students increase their potential for success through education, they will learn how to select a school that is right for them; how to apply for admission to a vocational or technical school, community college, or college/university; and how to succeed in these learning environments. Information is provided on how to conduct the job search for students who wish to enter the workforce right after high school or after additional education and training. They will learn how to prepare a winning resume, and how to develop effective interviewing skills. Students will become more skilled at using the Internet for career research and learn how to network safely using social media. The text also provides information on working for the federal government to include careers in the military, aerospace industry, and public service. Finally, students will consider the most important elements of life skills for all Americans: civic responsibilities, such as volunteering, registering to vote, jury duty, and draft registration.

### **Fourth Year (AS/LE-40X)**

09-154-G-050-10 (A)

09-154-G-050-20 (B)

*Recommended: Successful completion of third year*

### **AFR400/401**

2 credits

### **AS-300: Exploring Space: The High Frontier**

This is a science course that includes the latest information available in space science and space exploration. The course begins with the study of the space environment from the earliest days of interest in astronomy and early ideas of the heavens, through the Renaissance, and on into modern astronomy. It provides an in-depth study of the Earth, Sun, stars, Moon, and solar system, including the terrestrial and the outer planets. It discusses issues critical to travel in the upper atmosphere such as orbits and trajectories, unmanned satellites, and space probes. It investigates the importance of entering space and discusses manned and unmanned space flights, focusing on concepts surrounding spaceflight, space vehicles, launch systems, and space missions. The section on manned spaceflight focuses on the Space Shuttle, space stations and beyond, covering milestones in the endeavor to land on the Moon and to safely orbit humans and crafts for temporary and prolonged periods. The course covers the human aspect of spaceflight, focusing on the human experience in space. It also examines the latest advances in space technology, including robotics in space, the Mars Rover, and commercial uses of space.

### **AS-400: Management of the Cadet Corps**

Upper class cadets manage the entire corps under AFJROTC instructor supervision. This course is an AS option and practicum for those cadets to provide hands-on experience for the opportunity to put the theories of previous leadership courses into practice. All the planning, organizing, coordinating, directing, controlling, and decision-making will be done by the cadets, under the supervision of AFJROTC instructors. They practice their communication, decision-making, personal-interaction, managerial, and organizational skills.

### **AS-410: Survival: Survive•Return**

The *Survival* text is a synthesis of the basic survival information found in Air Force Regulation 64-4 *Survival Training*, and serves as another AS option. The survival instruction will provide training skills, knowledge, and attitudes necessary to successfully perform fundamental tasks needed for survival. Survival also presents "good to know" information that would be useful in any situation. The information is just as useful to an individual lost hunting or stranded in a snowstorm.

### **Leadership Education (LE) 400: Principles of Management**

*Leadership IV: Principles of Management* textbook is a guide to understanding the fundamentals of management, managing yourself, and others. Emphasis is placed on allowing the student to see himself/herself as a manager. Every organization, regardless of size, faces the challenge of managing operations effectively. No matter how well a manager carries out his or her job, there are always ways of doing at least part of the task more effectively. There are four building blocks of leadership considered in this text from the military and civilian perspective. Attention to these four areas will form a strong foundation for a capability to lead others – something that can be very valuable to you for the rest of your life. The four areas are Management Techniques, Management Decisions, Management Functions, and Managing Self and Others.

## **Drill and Ceremonies**

The Drill and Ceremonies course provides an in-depth introduction to drill and ceremonies. This is not a stand alone course, but it is to be taught as part of the Leadership Education 40% component for each Air Force Junior ROTC class. The Drill and Ceremonies course concentrates on the elements of military drill, and describes individual and group precision movements, procedures for saluting, drill, ceremonies, review, parades, and development command voice. Students are provided detailed instruction on ceremonial performances and protocol for civilian and military events and have the opportunity to personally learn drill. Though each class will follow an established lesson plan, most of the work is hands-on.

## **Wellness Curriculum**

Wellness is an official part of the Air Force Junior ROTC program, and is taught along with every level of AFJROTC. It is an exercise program focused upon individual base line improvements with the goal of achieving a national standard as calculated with age and gender. Wellness is instrumental in developing citizens of character dedicated to serving our nation and communities. The program is provided as a tool to help you develop individualized training programs for your cadets. Cadets will be given the opportunity to put into practice the wellness concepts that are taught in Leadership Education I. Instructors are free to include other activities cadets enjoy such as team sports in order to keep the Wellness Program fun and motivating. The Wellness Program is a 36-week program modifiable to meet individual goals. Personal improvement will be rewarded. The 36-week program is comprised of 19 exercises which can be conducted with minimal space and with minimal climate dependency (e.g. the 1-mile run). The exercises develop all muscle groups and provide sufficient anaerobic and aerobic intensity. They require no equipment and use only body weight and common objects (e.g. chairs).

## **Air Force JROTC Drill & Ceremony Class A/B**

09-003-G-050-10

**AFR406/407**

09-003-G-050-20

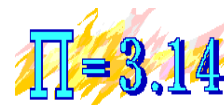
Open to 9-10-11-12

2 credits

This course is designed specifically for those cadets interested in a more intensive experience with Drill and Ceremony. The focus is on group precision movements, saluting procedures, drill, ceremonies, review, parades and development of command voice. Students will have the opportunity to personally learn drill. Students may compete in various competitions.



# Mathematics



	Course Title	9	10	11	12		Credits	Recommended
MAT108/108B	Math Lab I - Algebra I A/B	X					2	
MAT112A/112B	Math Lab II - Geometry A/B		X	X	X		2	Yes
MAT113A/113B	Math Lab III - Algebra II A/B		X	X	X		2	
MAT104/105	Algebra I A/B	X	X	X	X		2	Yes
MAT102/103	Algebra I - Part I A/B	X	X	X	X		2	
MAT200/201	Algebra I - Part II A/B		X	X	X		2	Yes
MAT202/203	Algebra II A/B	X	X	X	X		2	Yes
MAT114/115	Financial Algebra A/B			X	X		2	Yes
MAT162/163	WCSD Pre-IB Algebra II A/B	X	X				2	Yes
MAT106/107	Geometry A/B	X	X	X	X		2	Yes
MAT160/161	WCSD Pre-IB Geometry A/B	X	X				2	Yes
MAT300/301	Pre-Calculus/WCSD Pre-IB		X	X	X		2	Yes
MAT302	Trigonometry			X	X		1	Yes
MAT400/401	Advanced Placement Calculus A/B			X	X		2	Yes
MAT402/403	Consumer Math I A/B		X	X	X		2	
MAT700/701 MAT070/071	Foundations of Math A/B Individualized Foundations of Math A/B		X	X	X		2	
MAT800/801 MAT080/081	Consumer Math I A/B Individualized Consumer Math A/B			X	X		2	
MAT900/901 MAT090/091	Pre-Algebra A/B Individualized Pre-Algebra A/B	X	X	X	X		2	
HIM110/111 HIM210/211 HIM310/311 HIM410/411	Math I, II, III, IV (Hearing Impaired)	X	X	X	X		2	
LCC606/607	Math I A/B	X	X	X	X		2	
LCC608/609	Math II A/B	X	X	X	X		2	

Six Math credits are required for graduation and must include Algebra I or equivalency. Students must also achieve a 263 on the Math section of the Iowa Assessments. Six math credits are required for admission to most colleges and universities.

All courses emphasize 21st century skills and literacy development. Instruction is differentiated to meet the needs of all students.

The special education service delivery plan outlines services available for students with an Individualized Education Program (IEP).

## **Math Lab I - Algebra I A/B**

02-002-B-050-10 (A)

02-002-B-050-20 (B)

Open to 9th graders enrolled in Algebra I

2 credits

In this course, students will work to strengthen Pre-Algebra skills needed to be successful in Algebra I as well as support newly learned material. This course will concentrate on the enhancement, not introduction, of basic math computational skill and is to be taken concurrently with Math 104/105 (Algebra I). This course will incorporate mathematics lab experiences; computer based learning; traditional learning techniques and career focus experiences.

The credit for this class does NOT fulfill one of the six required math credits.

## **MAT108/108B**

## **Math Lab II - Geometry A/B**

02-002-B-050-10 (A)

02-002-B-050-20 (B)

Open to 10-11-12th graders enrolled in Geometry

2 credits

In this course, students will work to strengthen Algebra skills needed to be successful in Geometry as well as support newly learned material. This course will concentrate on the enhancement, not introduction, of basic algebraic principles and is to be taken concurrently with Math 106/107 (Geometry). This course will incorporate mathematics lab experiences; computer based learning; traditional learning techniques and career focus experiences.

The credit for this class does NOT fulfill one of the six required math credits.

## **MAT112A/112B**

**Math Lab III - Algebra II A/B**

02-002-B-050-10 (A)

02-002-B-050-20 (B)

Open to 10-11-12th graders enrolled in Algebra II 2 credits

In this course, students will work to strengthen Algebra and Geometry skills needed to be successful in Algebra II as well as support newly learned material. This course will concentrate on the enhancement, not introduction, of basic algebraic principles and is to be taken concurrently with Math 202/203 (Algebra II). This course will incorporate mathematics lab experiences; computer based learning; traditional learning techniques and career focus experiences.

The credit for this class does NOT fulfill one of the six required math credits.

**MAT113A/113B****Algebra I A/B**

02-052-G-050-10 (A)

02-052-G-050-20 (B)

Open to 9-10-11-12 2 credits

*Recommended: Successful completion of Pre-Algebra.*

Students will explore the following algebraic concepts: properties and operations of numerical and variable expressions, equation solving using equations to solve career context problems, performing operations with polynomials, systems of linear equations, solving inequalities, coordinate graphing of equations, factoring, radical expressions and equations containing radical expressions.

**MAT104/105****Algebra I - Part I A/B**

02-053-G-050-10 (A)

02-053-G-050-20 (B)

Open to 9-10-11-12 2 credits

*This course is specially designed for students with Individualized Education Plans, students will be individually scheduled into this course based on their identified learning needs.*

Students will become proficient in the language and skills of basic algebra. This course is the first of the two-year sequence in Algebra. Topics covered in this course include the properties and operations of numerical and variable expressions, equation solving, using equations to solve career context problems, performing operations with polynomials, and solving inequalities.

**MAT102/103****Algebra I - Part II A/B**

02-054-G-050-10 (A)

02-054-G-050-20 (B)

Open to 10-11-12 2 credits

*This course is specially designed for students with Individualized Education Plans, students will be individually scheduled into this course based on their identified learning needs.*

This course is the second semester of Algebra taught over an entire year. Students will become proficient in the language and skills of basic algebra. Students will explore the following algebraic concepts: properties and operations of numerical and variable expressions, equation solving, using equations to solve career context problems, and performing operations with polynomials, systems of linear equations, factoring, solving inequalities, coordinate graphing of equations, radical expressions and equations containing radical expressions.

**MAT200/201****Algebra II A/B**

02-056-G-050-10 (A)

02-056-G-050-20 (B)

Open to 9-10-11-12 2 credits

*Recommended: Successful completion of Algebra I*

Students will review, extend and apply topics of Algebra I. Topics

covered include: equations and inequalities, linear relations and functions, systems of equations and inequalities, polynomials, irrational numbers, complex numbers, quadratic equations and the quadratic formula, graphing and solving quadratic functions, trigonometric functions, matrices, and exponential and logarithmic functions.

**Financial Algebra A/B**

02-155-G-050-10 (A)

02-155-G-050-20 (B)

Open to 11-12 2 credits

*Recommended: Successful completion of Algebra I.*

This course is an applications-based learning course incorporating Algebra I, Algebra II, and Geometry topics. It includes a strong review of basic algebra formulas with variables, equations, functions, systems of equations, graphs, statistics and more. Selected advanced mathematics topics, such as piecewise functions, regressions limits, exponential functions, and linear/quadratic systems are also addressed. The algebra found in finance-related topics translates into powerful real-world problems. Students will learn about investments, credit, automobile expenses, insurance, income tax, household budgeting and more.

**MAT114/115****WCSD Pre-IB Algebra II A/B**

02-056-G-050-10 (A)

02-056-G-050-20 (B)

Open to 9-10 2 credits

*Recommended: Algebra I, Middle School or WCSD Pre-IB Geometry (previously or concurrently)*

WCSD Pre-IB Algebra II is an accelerated study that extends beginning algebraic concepts. Properties of second-degree (quadratic polynomials) functions are developed. Sample topics studied include sets, open sentences, linear equations, polynomials, factoring, rational numbers, relations, and functions, irrational numbers, and quadratics. This course is designed for highly motivated students interested in further study in mathematics, engineering, physical science, and other technical fields. A scientific calculator is recommended. Students enrolling in this course should be pursuing the International Baccalaureate Diploma.

**MAT162/163****Geometry A/B**

02-072-G-050-10 (A)

02-072-G-050-20 (B)

Open to 9-10-11-12 2 credits

*Recommended: Successful completion of Algebra I*

Students will study basic geometric concepts and topics with applications that have a career focus. Topics covered include: the language of geometry, reasoning, introduction to proof, parallel relationships, properties of quadrilaterals, parallelograms, circles, right triangles, polygons, trigonometry, coordinate geometry and constructions.

**MAT106/107****WCSD Pre-IB Geometry A/B**

02-072-G-050-10 (A)

02-072-G-050-20 (B)

Open to 9-10 2 credits

*Recommended: Algebra I*

WCSD Pre-IB Geometry is an accelerated study of plane and solid geometric figures with emphasis on plane figures. The course stresses knowledge and application of geometry as a logical system, with definitions, postulates, and theorems, especially using analysis and deductive reasoning. Lessons include work in ratio and proportion, Pythagorean theorem, areas, special triangles,

**MAT160/161**

volumes, and other metric work. Memorization and application is an important part of this course. This course is also writing intensive. A scientific calculator, geometric compass and protractor are suggested. This course is designed for students with advanced abilities who are pursuing the International Baccalaureate Diploma.

**Pre-Calculus A/B** **MAT300/301**  
**WCSD Pre-IB Pre-Calculus A/B**

02-110-G-050-10 (A)  
 02-110-G-050-20 (B)  
 Open to 10-11-12 2 credits

*Recommended: Successful completion of Algebra II*

Students will review, extend and apply topics of Geometry and Algebra II. Topics covered include the following: linear relations and functions, matrices, the nature of graphs, polynomial and rational functions, trigonometry, conic sections, exponential and logarithmic functions, sequences and series, and probability. The course is geared to students interested in mathematics, physics, chemistry, engineering, and other related technical fields. Students who have completed both Algebra and Geometry in Middle School and who have taken WCSD Pre-IB Algebra II as a freshman and who have the consent of the teacher are encouraged to enroll in IB Pre-Calculus as a sophomore.

**Trigonometry** **MAT302**

02-103-G-050-00  
 Open to 11-12 1 credit

*Recommended: Successful completion of Algebra II*

Students will become familiar with trig functions and their graphs including circular and triangular trigonometry. This one semester course is designed to give students a solid background in trigonometry. Students begin with a review of angles and angle measurement and continue into the study of trigonometric functions with an emphasis on graphing, inverse functions, and trigonometric identities and equations.

**AP Calculus A/B** **MAT400/401**

02-124-H-050-10 (A)  
 02-124-H-050-20 (B)  
 Open to 11-12 2 credits

*Recommended: Completion of Pre-Calculus*

Topics include limits and continuity, derivatives and their application and integration.

**Consumer Math I A/B** **MAT402/403**

02-157-G-050-10 (A)  
 02-157-G-050-20 (B)

**Consumer Math I A/B** **MAT800/801**  
**Indiv. Consumer Math I A/B** **MAT080/081**

02-157-S-050-00 (A)  
 02-157-S-050-00 (B)  
 Open to 10-11-12 2 credits

Students will review basic computation and how it relates to consumer and career topics. In this course, students will review computation with whole numbers, fractions, decimals, and percents. They will use these skills to study gross earnings, personal finance such as checking accounts, borrowing and saving money, and consumer spending topics such as discounts, insurance, taxes, purchasing automobiles, travel, housing costs, installment purchases and bill paying. This is a study of mathematics needed for everyday adult living situations.

**Foundations of Math A/B**  
**Indiv. Foundations of Math A/B**

**MAT700/701**  
**MAT070/071**

02-002-S-050-00 (A)  
 02-002-S-050-00 (B)  
 Open to 10-11-12 2 credits  
 Students will build skills in the areas of addition, subtraction, multiplication, and division. Students will extend their learning to whole numbers, fractions, and decimals. Instruction will include application of problem solving skills in areas that are encountered in postsecondary settings, such as comparison shopping, making change, and representing data. Students will develop number sense to understand the flexibility of numbers and apply various strategies that can be used to solve math problems.

**Pre-Algebra A/B** **MAT900/901**  
**Individualized Pre-Algebra A/B** **MAT090/091**

02-051-S-050-00 (A)  
 02-051-S-050-00 (B)  
 Open to 9-10-11-12 2 credits  
 Students will be introduced to the language and skills of basic algebra. This course is a first step in preparing students to meet graduation requirements for math. Topics covered in this course include the properties and operations of numerical and variable expressions, equation solving, using equations to solve real world problems; and solving inequalities. Property and problem solving are also covered.

**Math I, II, III, IV A/B**

02-002-S-050-00 **HIM110/111**  
 02-002-S-050-00  
 02-002-S-050-00 **HIM210/211**  
 02-002-S-050-00  
 02-157-S-050-00 **HIM310/311**  
 02-157-S-050-00  
 02-051-S-050-00 **HIM410/411**  
 02-051-S-050-00  
 Open to 9-10-11-12 2 credits

Students will work on math skills designed to meet their individual needs. These skills may include basic math operations, consumer math and pre-algebra using sign language.

Participation in Life Centered Curriculum Courses is determined through an IEP team decision. The Course of Study within the IEP defines graduation requirements based on individual needs.

**Math I A/B** **LCC606/607**

02-002-S-050-00 (A)  
 02-002-S-050-00 (B)  
 Open to 9-10-11-12 2 credits  
 In Math I, students will continue to build a solid foundation of addition, subtraction, multiplication, and division. Students will extend their learning to whole numbers, fractions, and decimals. Instruction will include beginning patterns, decimals and powers of 10, measurement, operations with fractions: addition and subtraction, understanding and reading word problems, using operations to solve problems, and place value decimals to billions. Students will develop number sense to understand the flexibility of numbers and apply various strategies that can be used to solve math problems.

**Math II A/B****LCC608/609**

02-002-S-050-00 (A)

02-002-S-050-00 (B)

Open to 9-10-11-12

2 credits

In Math II, students will build on concepts learned in Math I using operations to solve problems. Instruction will include decimals and powers of 10, understanding fractions, percents, operations with fractions: multiplication and division, as well as positive and negative numbers. Students will also explore Geometry concepts such as polygons and symmetry.

# Music



	Course Title	9	10	11	12		Credits	Recommended Prerequisite
MUS100/101 MUS102/103	Band A/B	X	X	X	X		2	
MUS307	Marching Band	X	X	X	X		.25	Yes
MUS104/105 MUS106/107	Orchestra A/B	X	X	X	X		2	
MUS108/109	Treble Clef Chorus A/B	X	X	X	X		2	
MUS110/111	Bass Clef Chorus A/B	X	X	X	X		2	
MUS112	Color Guard	X	X	X	X		.5	Audition
MUS121	Jazz Improvisation (Spring only)			X	X		1	Audition
MUS130/131	Intro to Alternative String Instruments- Guitar Level I A/B	X	X	X	X		2	
MUS132/133	Alternative String Instruments-Guitar Level II A/B		X	X	X		2	
MUS204/205	Concert Choir A/B	X (E)	X	X	X		2	Audition
MUS300	Music Theory A (Intro) (Fall only)			X	X		1	Instruct App
MUS302	Music Theory B (Adv) (Spring only)			X	X		1	Yes
MUS305	Wings (Eash HS pilot)		X	X	X		1	
MUS308	Applied Instrumental Lessons		X	X	X		1	

All courses emphasize 21st century skills and literacy development. Instruction is differentiated to meet the needs of all students. The special education service delivery plan outlines services available for students with an Individualized Education Program (IEP).

**Note:** Instrumental music instruction is available to all students who have a desire to play a band or orchestral instrument even if they have had no experience. They will be assigned to a skills sectional and eventually a large group ensemble. A sequence of skills needed to successfully play in the organization will be outlined and the student will work on these skills until they have developed enough technique to be able to successfully participate in the large group.

**Note:** Jazz Band and Percussion Ensemble are extra curricular activities and not specific courses. For more information, please see the Band teacher at the respective high schools.

## **Band A/B**

05-101-G-050-11 (A)  
05-101-G-050-21 (B)  
05-101-G-050-12 (A)  
05-101-G-050-22 (B)

Open to 9-10-11-12

9<sup>th</sup>/10<sup>th</sup> **MUS100/101**  
11<sup>th</sup>/12<sup>th</sup> **MUS102/103**

2 credits

A variety of standard wind band literature will be studied and performed. Students in band will be participating in activities such as concerts, festivals, marching shows, parades, and other civic and special events. To continue the development of individual musicianship students will be required to attend individual or small group lessons outside of class. Students electing this class are required to participate in all performances unless excused by the director prior to the event.

## **Marching Band**

05-103-G-025-00

Open to 9-10-11-12

**MUS307**

.25 credit

*Recommended: Required for all East High Band students. Required for all 10-12 West High Band students. Optional for 9th grade West students (must also be enrolled in the 9th gr Concert Band). Must*

*attend all rehearsals and performances, attend marching band camp.*

*Co-requisite: enrolled in appropriate band class*

The marching band is a fun, exciting, high profile, competitive group with an extensive rehearsal and performance schedule. The marching band performs at all home football games, the homecoming parade, and competitions on Saturdays. Students are required to attend marching camp at the beginning of August. At marching band camp, students learn and memorize music, drill, and marching fundamentals so that future rehearsals can be used to clean and refine the marching band show. Marching band meets every day of the first quarter during zero hour.

## **Orchestra A/B**

05-104-G-050-11 (A)  
05-104-G-050-21 (B)  
05-104-G-050-12 (A)  
05-104-G-050-22 (B)

Open to 9-10-11-12

9<sup>th</sup>/10<sup>th</sup> **MUS104/105**  
11<sup>th</sup>/12<sup>th</sup> **MUS106/107**

2 credits

Orchestra students will study and perform a variety of standard repertoire. To continue developing individual musicianship and technique, students will be required to attend individual or small group lessons outside of class. Participation in Chamber Orchestra, state honors orchestras, solo festivals and similar events are available to advanced students. Students are required to participate in all performances unless excused by the director prior to the event.

**Treble Clef Chorus A/B****MUS108/109**

05-111-G-050-12 (A)

05-111-G-050-22 (B)

Open to 9-10-11-12

2 credits

This class meets daily and is open to all girls. Students will learn to sing correctly, improve music reading skills, and study basic music theory. A variety of choral literature will be studied and performed. Students will have the opportunity to participate in music festivals. To continue the development of individual musicianship, students will be required to attend individual or small group lessons outside of class. Students electing this class are required to participate in all performances unless excused by the director prior to the event.

**Bass Clef Chorus A/B****MUS110/111**

05-111-G-050-11 (A)

05-111-G-050-21 (B)

Open to 9-10-11-12

2 credits

This class meets daily and is open to all boys. Students will learn to sing correctly, improve music-reading skills and study some music theory. A variety of choral literature will be studied and performed. Students will have the opportunity to participate in music festivals. To continue the development of individual musicianship, students will be required to attend individual or small group lessons outside of class. Students electing this class are required to participate in all performances unless excused by the director prior to the event.

**Color Guard****MUS112**

08-006-G-025-00

Open to 9-10-11-12

.5 credit

*Recommended: Audition*

Students will explore the elements of musical expression through coordinated movement. The color guard rehearses and performs with the band at all marching functions, including home football games, parades and all festivals/competitions.

**Jazz Improvisation****MUS121**

05-105-G-050-10

Open to 11-12

1 credit

*Recommended: Audition Spring offering only*

Students will explore both abstract elements and essential functions of music improvisation. The course stresses rudiments of jazz chord and scale spellings, chord/scale/mode relationships, jazz nomenclature, basic forms, and phrase construction. Aural training, including transcription or recorded jazz solos, will be emphasized. Class performance will focus on the blues form, as well as jazz standards with simple progressions. If an appropriate instrumentation can be assembled, the class can also function as a small jazz ensemble to perform at school and community events.

**Intro to Alternative String Instruments-Guitar Level I A/B****MUS130/131**

05-108-G-050-11

05-108-G-050-21

Open to 9-10-11-12

2 credits

This course is designed for students with no previous formal guitar training. Students will receive guidance and direction in problem solving related to playing guitar at a beginning level. Students will learn chords and melodies in first position, reading standard notation, TAB and chord charts. Students will be introduced to both strumming and finger style playing. Success in the courses is based primarily on participation and effort.

**Alternative String Instruments-Guitar Level II A/B****MUS132/133**

05-108-G-050-12

05-108-G-050-22

Open to 9-10-11-12

2 credits

*Recommended: Intro to Alternative String Instruments-Guitar Level I or previous formal instruction.*

Level II will expand on skills learned in Level I to include advanced chords, melodies, composition and improvisation. Students will be introduced to the various styles and genres of music played by the guitar. Compared to Level I higher emphasis and expectation will be placed on skill mastery and performance.

**Concert Choir A/B****MUS204/205**

05-110-G-050-10 (A)

05-110-G-050-20 (B)

Open to 9-10-11-12 (E)

Open to 10-11-12 (W)

2 credits

*Recommended: Audition*

During daily class meetings students will work to develop a good choral blend with all voice parts, correct diction, proper breathing and gain a rounded appreciation of choral music. A wide variety of choral literature will be studied and performed in concert settings. To continue the development of individual musicianship students will be required to attend individual or small group lessons outside of class. Students will also have the opportunity to participate in music festivals. Students are required to participate in all performances unless excused by the director prior to the event.

**Music Theory A (Intro)****MUS300**

05-113-G-050-10

Open to 11-12

1 credit

*Instructor Approval Fall offering only*

Students will build their knowledge of basic music theory concepts. This course will emphasize material in the areas of musical notation, major and minor key signatures, scale construction, chord construction, musical and rhythmic dictation and the realization of two part voice leading. Students will develop a sense of self-discipline required for the study of music, a sense of relative pitch, verbal musical literacy, and the ability to listen actively.

**Music Theory B (Adv)****MUS302**

05-113-G-050-20

Open to 11-12

1 credit

*Recommended: Music Theory A or Instructor Approval Spring offering only*

Students will continue to build their knowledge throughout intermediate to advanced music theory concepts. This course will emphasize material in the areas of Roman numeral analysis, two part voice leading, non-chord tones, harmonic functions, and cadential formulas. Students will continue to develop a sense of self-discipline required for the study of music, verbal musical literacy, and develop ear training skills.

**Wings (East High pilot)****MUS305**

05-116-G-050-00

Open to 10-11-12

1 credit

*(Inspirational based choral music performance)*

Using music as a vehicle, students will travel through time to learn about the history and context of 19th and 20th century cultural music. We will explore the impact on society of genres such as gospel, inspirational, jazz, blues, and rock and roll. While discussing these topics students will have the opportunity to engage with the music and have possible performances showcasing their knowledge.

**Applied Instrumental Lessons****MUS308**

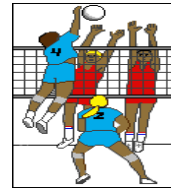
05-109-G-050-00

Open to 10-11-12

1 credit

Students will improve technique, tone, and musicianship on instrument through practice of etudes, exercises, scales, and solos. Students are expected to practice daily and will have weekly scheduled lessons. Students will be expected to learn all major scales and chromatic scale up to All-State tempo by the end of the first quarter of study. Objectives can be added as needed to fit specific student goals. Students must approach this class with strict diligence.

# Physical Education



See counselors for SCED numbers in Physical Education.	Course Title	9	10	11	12		Credits	Recommended Prerequisite
	Physical Education	X	X	X	X		1	
	Adapted/Modified Physical Education	X	X	X	X		1	
	Community Wellness/PE 70				X		1	X
	Strength & Conditioning	X	X	X	X		1	
	Flex and Fit	X	X	X	X		1	
	Health and Life Management	X	X	X	X		1	

Students are required to be in Physical Education a minimum of one semester each year (unless they exempt out). **For any PE exemptions, see counselor.** As a graduation requirement they must complete and pass 4 physical education courses in addition to one Health & Life Management credit. All Physical Education courses encourage students to explore activities that can be incorporated as a part of a healthy working lifestyle. Corporations and businesses associate healthy lifestyles with productivity in the workplace. Exposure to any of the physical education class offering should help students transition to active healthy adulthood.

All courses emphasize 21st century skills and literacy development. Instruction is differentiated to meet the needs of all students. **The special education service delivery plan outlines services available for students with an Individualized Education Program (IEP).**

## Physical Education

Open to 9-10

**PHE121**

Open to 11-12

**PHE122**

General Physical Education allows students to learn social and personal responsibility associated with participation in physical activity and to understand that physical activity provides an opportunity for enjoyment, challenge, self-exploration, social interaction, and the pursuit of leisure-time activity.

Activities taught include:

Aerobics/Dance	Floor Hockey	Pickleball	Softball
Archery	Frisbee Golf	Ping Pong	Speedball
Arena Football	Golf	PowerWalking	Team Handball
Badminton	Ice Fishing	Rock Climbing	Tennis
Basketball	Indoor Games	Roller Skating	Volleyball
Bocce Ball	Matt Ball	Rugby	Weightlifting
Cross Country Skiing	New Zealand Ball	Snow Shoeing	Whiffle Ball
Eclipse Ball	Omnikin Ball	Soccer	Yoga/Tai Chi
Flag Football	Pass-Catch		

- \* All Semesters will include Fitness Activities and Fitness testing.
- \* Some activities are subject to availability and weather conditions.

## Adapted/Modified Physical Education

**PHE123/124**

Open to 9-10-11-12

Appropriate Physical Education activities are designed to meet a wide range of academic, social, emotional and physical needs. Adapted/Modified Physical Education classes utilize inclusive practices which further enhance student learning.

## Community Wellness/PE 70

**PHE222**

Open to 12

*Recommended: must have previously taken one physical education class*

This PE course is a transition course for seniors to assist them with connecting to community wellness activities and classes. The course is designed to be an independent study program for students to participate in wellness activities at the Cedar Valley Sportsplex and/or other exercise facilities. Credit will be given for minutes in and above target heart rate zone as recorded on their heart rate monitor. West and East High PE faculty monitor student progress. Students are responsible for logging hours and turning in time sheets weekly. Credit will be given when students complete a log of a minimum of 70 activity hours to receive credit.

## Strength and Conditioning

**PHE221**

Open to 9-10-11-12

The focus of this class is to build strength through regular participation in weightlifting opportunities provided in class. The lifting will primarily focus on free weightlifting and Olympic lifts. Students will learn proper lifting techniques, weight room safety, and proper rest and nutrition for maximum results. In this class, students will be expected to lift and participate in conditioning class throughout the semester. Agility and conditioning are incorporated as a part of each workout. Students are expected to participate in all the activities during class. Students are also expected to keep track of their lifting progress; chart lifts each day during class, and chart their cardio workouts as well.



**Fitness PE****PHE231**

Open to 9-10-11-12

This is a non-competitive, individually based course focused on life-time fitness/wellness through movement activities. Students will focus their workouts incorporating wellness as a part of a healthy lifestyle through different types of exercise. Movement and activities will include but not be limited to non-competitive games and activities, walking and jogging, yoga/Pilates, fitness videos, aerobic workouts, and circuit training. This class is designed to be a safe, non-judgmental, fitness bases course. Students are expected to keep track of their workouts, plan an exercise program, complete an exercise program, set fitness goals, and complete a summary paper.

**Health and Life Management****PHE300**

08-057-G-050-00

**Health and Life Management****PHE020**

08-057-S-050-00

**Health and Life Management****PHE030**

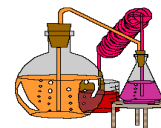
08-057-S-050-00

Open to 9-10-11-12

*This class is a requirement for graduation..*

This course is designed to teach students to obtain, process, and understand basic health information and services that are needed to make appropriate health decisions throughout life. Students will understand basic health concepts to enhance personal, family and community health, develop literacy/skills as well as critical thinking/decision making skills related to personal health and wellness. They will learn to develop and demonstrate behaviors that foster healthy, active lifestyles. The class focuses on personal health topics as well as evaluation of consumer health information and advertising. Course objectives include helping students develop decision-making, communication, interpersonal, and coping skills and strategies. This class meets the requirements of the State of Iowa health literacy skills and CPR training.

# Science



	Course Title	9	10	11	12		Credits	Recommended Prerequisite
<i>EARTH SCIENCES</i>								
SCI202/203	Earth and Space Science A/B	X	X	X	X		2	
SCI900/901 SCI090/091	Earth and Space Science A/B Individualized Earth and Space Science A/B	X	X	X	X		2	
SCI390/391	Advanced Earth and Space Science/WCSD Pre-IB A/B	X	X	X	X		2	
SCI208/209	Geology		X	X	X		2	Yes
SCI800/801 SCI080/081	Geology A/B Individualized Geology A/B		X	X	X		2	Yes
<i>LIFE SCIENCES</i>								
SCI200/201	Biology A/B		X	X	X		2	
SCI700/701 SCI070/071	Biology A/B Individualized Biology A/B		X	X	X		2	
SCI210/211	Advanced Biology/WCSD Pre-IB		X	X	X		2	Yes
SCI404/405	Advanced Placement Biology A/B			X	X		2	Yes
SCI303/304	Ecology A/B		X	X	X		2	Yes
SCI402/403	Human Anatomy and Physiology A/B		X	X	X		2	Yes
<i>PHYSICAL SCIENCES</i>								
SCI100	Physical Science A		X	X	X		2	
SCI660 SCI060	Physical Science A Individualized Physical Science A		X	X	X		2	
SCI101	Physical Science B		X	X	X		2	
SCI661 SCI061	Physical Science B Individualized Physical Science B		X	X	X		2	
SCI300/301	Chemistry A/B		X	X	X		2	Yes
SCI162/163	Advanced Chemistry/WCSD Pre-IB		X	X	X		2	Yes
SCI409/410	Advanced Placement Chemistry A/B			X	X		2	Yes
SCI400/401	Physics A/B		X	X	X		2	Yes
SCI370/371	WCSD Pre-IB Physics A/B		X	X	X		2	
SCI407/408	Advanced Placement Physics I		X	X	X		2	Yes
SCI411/412	Advanced Placement Physics II			X	X		2	Yes
HIM130/131	Physical Science (Hearing Impaired)	X	X	X	X		2	
HIM230/231	Biology (Hearing Impaired)	X	X	X	X		2	
HIM330/331	Earth Science (Hearing Impaired)	X	X	X	X		2	
LCC122/123 LCC222/223 LCC322/323	Science for Life I, II, III A/B	X	X	X	X		2	

All courses emphasize 21st century skills and literacy development. Instruction is differentiated to meet the needs of all students. The special education service delivery plan outlines services available for students with an Individualized Education Program (IEP).

**Graduating classes of 2018, 2019, and 2020:** Six science credits are required for graduation and must include 2 credits of a Physical Science and 2 credits of a Life Science. Six science credits are required for admission to most colleges and universities.

- GRADE 9:** Physical Science, Biology or Advanced Biology/WCSD Pre-IB, Advanced Chemistry/WCSD Pre-IB
- GRADE 10:** Biology, Adv Biology/WCSD Pre-IB, Human Anatomy and Physiology, Ecology, Chemistry, Adv Chemistry/WCSD Pre-IB, Physical Science, Geology, Physics, WCSD Pre-IB Physics, AP Physics I
- GRADE 11:** Biology, Adv Biology/WCSD Pre-IB, AP Biology, IB Biology SL, Human Anatomy and Physiology, Ecology, Chemistry, Adv Chemistry/WCSD Pre-IB, AP Chemistry, IB Chemistry SL, IB Chemistry HL, Physical Science, Geology, Physics, WCSD Pre-IB Physics, AP Physics I, AP Physics II, IB Physics SL
- GRADE 12:** Biology, Adv Biology/WCSD Pre-IB, AP Biology, IB Biology SL, Human Anatomy & Physiology, Ecology, Chemistry, Adv Chemistry/WCSD Pre-IB, AP Chemistry, IB Chemistry SL, IB Chemistry HL, Physical Science, Geology, Physics, WCSD Pre-IB Physics, AP Physics I, AP Physics II, AP Physics SL

**Graduating classes of 2021 and beyond:** Six science credits are required for graduation and must include 2 credits of Earth and Space Science, 2 credits of Biology, and 2 credits of Physical Science (or equivalent chemistry/physics option).

- GRADE 9:** Earth and Space Science, Adv Earth and Space Science/WCSD Pre-IB, Biology, Adv Biology/WCSD Pre-IB
- GRADE 10:** Earth and Space Science, Adv Earth and Space Science/WCSD Pre-IB, Biology, Adv Biology/WCSD Pre-IB, Human Anatomy and Physiology, Ecology, Physical Science, Adv Physical Science, Chemistry, Physics, AP Physics I
- GRADE 11:** Earth and Space Science, Adv Earth and Space Science/WCSD Pre-IB, Biology, Adv Biology/WCSD Pre-IB, AP Biology, IB Biology SL, Human Anatomy and Physiology, Ecology, Physical Science, Adv Physical Science, Chemistry, AP Chemistry, IB Chemistry SL, IB Chemistry HL, Physics, AP Physics I, AP Physics II
- GRADE 12:** Earth and Space Science, Adv Earth and Space Science/WCSD Pre-IB, Biology, Adv Biology/WCSD Pre-IB, AP Biology, IB Biology SL, Human Anatomy & Physiology, Ecology, Physical Science, Adv Physical Science, Chemistry, AP Chemistry, IB Chemistry SL, IB Chemistry HL, Physics, AP Physics I, AP Physics II,

### **Earth and Space Science A/B**

03-008-G-050-10 (A)  
03-008-G-050-20 (B)

### **Earth and Space Science A/B**

### **Individualized Earth and Space Science A/B**

03-008-S-050-00 (A)  
03-008-S-050-00 (B)

Open to 9-10-11-12

**SCI202/203**

**SCI900/901**

**SCI090/091**

2 credits

Earth and Space Science builds on middle school ideas and skills, allowing high school students to explain more in-depth phenomena. The course will help students formulate an answer to these questions: "What is the universe, and what is Earth's place in it?" Topics include the universe and its stars, the solar system and the history of planet Earth. "How and why is Earth constantly changing?" Topics include earth materials and systems, plate tectonics, the roles of water on earth, weather, climate, and biogeology. "How do Earth's surface processes and human activities affect each other?" Topics include natural resources and hazards, humanity's impact on Earth systems, and global climate change. This course blends these core ideas with scientific and engineering practices to support students in developing useable knowledge to explain ideas across the science disciplines.

### **Adv. Earth and Space Science/WCSD Pre-IB A/B**

03-008-E-050-10 (A)

03-008-E-050-20 (B)

Open to 9-10-11-12

**SCI390/391**

2 credits

Students who possess both high science aptitude and strong interest are encouraged to enroll in Advanced Earth Science instead of the Earth Science course. Earth and Space Science builds on middle school ideas and skills, allowing high school students to explain more in-depth phenomena. The course will help students formulate an answer to these questions: "What is the universe, and what is Earth's place in it?" Topics include the universe and its stars, the solar system and the history of planet Earth. "How and why is Earth constantly changing?" Topics include earth materials and systems, plate tectonics, the roles of water on earth, weather, climate, and biogeology. "How do Earth's surface processes and human activities affect each other?" Topics include natural resources and hazards, humanity's impact on Earth systems, and global climate change. This course blends these core ideas with scientific and engineering practices to support students in developing useable knowledge to explain ideas across the science disciplines. Students will also be involved in long-term research projects designed to help them develop writing and critical thinking skills.

<b>Geology A/B</b> 03-002-G-050-10 (A) 03-002-G-050-20 (B)	<b>SCI208/209</b>
<b>Geology A/B</b> <b>Individualized Geology A/B</b> 03-002-S-050-00 (A) 03-002-S-050-00 (B) Open to 10-11-12 <i>Recommended: One year of science</i> Students will learn the structure of the earth including earth's rocks and minerals. Also, units on maps and mapping will be discussed. Plate tectonics will be introduced as well as the associated events of mountain building, rifting, folds and faults, volcanoes, and earth quakes. The destructive forces of the earth's atmosphere will then wear away the earth by erosion due to water, ice, and wind. River systems and drainage basins will be analyzed. Glacial erosion and associated features will be introduced. Attention to Iowa's glacial features will be noted. Finally, wind and its power of erosion will be studied. The history of earth, fossils, and geologic time will also be topics of discussion.	<b>SCI800/801</b> <b>SCI080/081</b>  2 credits
<b>Biology A/B</b> 03-051-G-050-10 (A) 03-051-G-050-20 (B)	<b>SCI200/201</b>
<b>Biology A/B</b> <b>Individualized Biology A/B</b> 03-051-S-050-00 (A) 03-051-S-050-00 (B) Open to 10-11-12 <i>Recommended: One year of Earth Science</i> Students will conduct investigations and gather evidence to explain how organisms live and grow, how and why organisms interact with their environment, how characteristics of one generation are passed on to the next, and how members of the same species can have different characteristics. Students will construct explanations and use models to evaluate the evidence that shows how different species are related. Students will make and defend claims and analyze and interpret data in the context of biology core ideas.	<b>SCI700/701</b> <b>SCI070/071</b>  2 credits
<b>Advanced Biology A/B</b> Open to 10-11-12	<b>SCI210/211</b> 2 credits
<b>WCSD Pre-IB Adv. Biology A/B</b> Open to 9-10 03-052-E-050-10 (A) 03-052-E-050-20 (B) Students who possess both high science aptitude and strong interest are encouraged to enroll in Advanced Biology instead of the Biology course. Students will conduct investigations and gather evidence to explain how organisms live and grow, how and why organisms interact with their environment, how characteristics of one generation are passed on to the next, and how members of the same species can have different characteristics. Students will construct explanations and use models to evaluate the evidence that shows how different species are related. Students will make and defend claims and analyze and interpret data in the context of biology core ideas. Students will also be involved in long-term research projects designed to help them develop writing and critical thinking skills.	2 credits

<b>Advanced Placement (AP) Biology A/B</b> 03-056-H-050-10 (A) 03-056-H-050-20 (B) Open to 11-12 <i>Recommended: One year of Biology with a grade of B or higher.</i> This course is designed to be the equivalent of a college introductory biology course. Students are provided with the conceptual framework, factual knowledge, and analytical skills, necessary to deal with the rapidly changing science of Biology. Three general areas will be emphasized: molecules and cells, genetics and evolution, and organisms and populations. Laboratory experiences are an integral part of the course, including written laboratory reports.	<b>SCI404/405</b>  2 credits
<b>Ecology A/B</b> 03-003-G-050-10 (A) 03-003-G-050-20 (B) Open to 10-11-12 <i>Recommended: One year of science.</i> Students will develop an awareness of current environmental issues and the technologies for dealing with them. Topics such as solid and hazardous waste disposal, oil spill, wastewater treatment, and air pollution will be included. Examples of requirements include research and experiencing environmental issues through indoor and outdoor experiences, guest speakers, field trips, interactive activities, readings and projects. Class includes an independent research component.	<b>SCI303/304</b>  2 credits
<b>Human Anatomy and Physiology A/B</b> 03-053-G-050-10 (A) 03-053-G-050-20 (B) Open to 10-11-12 <i>Recommended: Biology &amp; Chemistry</i> <i>Chemistry may be taken concurrently</i> Students will learn the structure (anatomy) and operation (physiology) of various tissues, organs, and organ systems of the human body. Laboratory work comprises a major portion of the course involving microscopes, dissection of a cat, and numerous chemical and/or biological techniques. This course is useful in preparation for medical, biological and physical education careers.	<b>SCI402/403</b>  2 credits
<b>Physical Science A</b> 03-159-G-050-10 (A)	<b>SCI100</b>
<b>Physical Science A</b> <b>Individualized Physical Science A</b> 03-159-S-050-00 (A) Open to 9-10-11-12 This is an introductory level physics course designed around motion and energy. Students will investigate how objects are affected by the laws of motion, gravity, and forces. The students will design and evaluate a device that minimizes the effects of these forces on macroscopic objects. The students will also explore how energy is converted, transferred and conserved within a system. Finally, the students will investigate electromagnetic energy in the forms of electricity, magnetism, and light. This course will include some quantitative expressions at an Algebra I level.	<b>SCI660</b> <b>SCI060</b>  1 credit

**Physical Science B** SCI101  
03-159-G-050-20 (B)  
**Physical Science B** SCI661  
**Individualized Physical Science B** SCI061  
03-159-S-050-00 (B)  
Open to 9-10-11-12 1 credit

This is an introductory level chemistry class that focuses on matter and interactions. Students will explore the periodic table to discover trends and patterns among the elements that make up all matter. The students will also use chemical reactions to show how particles within atoms interact with each other to form new substances while mass and the number of atoms are conserved. The students will communicate scientific and technical information about why the molecular level is important in the design of materials. Finally, the students will use models and nuclear reactions to investigate how changes within the nucleus occur to create energy through the processes of fission and fusion.

**Chemistry A/B** SCI300/301  
03-101-G-050-10 (A)  
03-101-G-050-20 (B)  
Open to 10-11-12 2 credits

*Recommended: One year of Science and Algebra I*

This is a college preparatory class that focuses on matter and its interactions. Students will explore the periodic table to discover trends and patterns among the elements that make up all matter. The students will also use chemical reactions to show how particles within atoms interact with each other to form new substances while mass and the number of atoms are conserved. The students will use stoichiometry to explain and explore the relationships between different chemical quantities as used in industry. The students will communicate scientific and technical information about why the molecular level is important in the design of materials. Finally, the students will use models and nuclear reactions to investigate how changes within the nucleus occur to create energy through the processes of fission and fusion. Some mathematical expressions will be used at a Geometry level.

**Advanced Chemistry A/B** SCI162/163  
Open to 10-11-12 2 credits

**WCSD Pre-IB Adv. Chemistry A/B**

Open to 10 2 credits  
03-102-G-050-10 (A)  
03-102-G-050-20 (B)

*Recommended: Algebra I*

Pre-IB Chemistry is a one-year course that builds the foundation for IB/AP Chemistry. Topics include the nature of matter, atomic structure and theory, periodic table, bonding, chemical reactions, solutions, thermodynamics, equilibrium, and acids and bases. Laboratory notebooks are required and must be organized and completed for each lab. This course includes lab investigations developed by the students. This course has a special focus on dimensional analysis, laboratory writing, along with a broader coverage of topics to prepare students for IB SL Chemistry or IB SL Physics course.

**Advanced Placement (AP) Chemistry A/B** SCI409/410  
03-106-H-050-10 (A)  
03-106-H-050-20 (B)  
Open to 11-12 2 credits

*Recommended: One year of Chemistry and Algebra II (Algebra II may be taken concurrently)*

The Advanced Placement Chemistry course is the equivalent of a college introductory chemistry course. It provides students with a depth of understanding of fundamentals and a competence in dealing with chemical problems. Laboratory experiences are an essential part of the course. Four general areas are emphasized: structure of matter, states of matter, reactions and descriptive chemistry.

**Physics A/B** SCI400/401  
03-151-G-050-10 (A)  
03-151-G-050-20 (B)  
Open to 10-11-12 2 credits

*Recommended: One year of Science and Geometry, which may be taken concurrently*

This is a college preparatory physics course designed around motion and energy. Students will investigate and calculate how objects are affected by the laws of motion, gravity, and forces. The students will design and evaluate a device that minimizes the effects of these forces on macroscopic objects. The students will also explore and measure how energy is converted, transferred and conserved within a system. Finally, the students will investigate and calculate electromagnetic energy in the forms of electricity, magnetism, and the different parts of the electromagnetic spectrum. This course will include quantitative expressions at a Geometry level.

**WCSD Pre-IB Physics A/B** SCI370/371  
03-151-E-050-10 (A)  
03-151-E-050-20 (B)  
Open to 10-11-12 2 credits

*Recommended: One year of Science and Geometry, which may be taken concurrently. This course is recommended for students who plan to take IB Physics.*

The WCSD Pre-IB Physics will focus on dimensional analysis, laboratory writing, and a broader range of topics than the general Physics course. In addition, the pace will be faster and include problem solving on a deep and complex level. Students who plan to take the IB Physics course are recommended to take this course.

**Advanced Placement (AP) Physics I A/B** SCI407/408  
03-155-H-050-11 (A)  
03-155-H-050-21 (B)  
Open to 10-11-12 2 credits

*Recommended: One year of science and Algebra II which may be taken concurrently. No previous physics coursework is necessary.*

AP Physics I is designed to be equivalent to the first semester of an introductory, algebra-based college physics class. It is appropriate for any student intending to attend college and especially those who may continue into a scientific, medical, engineering, manufacturing, or technical career. Physics is considered to be the most basic science, with applications to a wide variety of situations and most professional careers. Students will study the interactions between energy and matter. Students will explore principles of Newtonian mechanics, work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Laboratory experiments will be a major part of this course.

**Advanced Placement (AP) Physics II A/B****SCI411/412**

03-155-H-050-12 (A)

03-155-H-050-22 (B)

Open to 11-12

2 credits

*Recommended: Advanced Placement Physics I and Pre-Calculus which may be taken concurrently*

AP Physics II is designed to be equivalent to the second semester of an introductory, algebra-based college physics class. It is appropriate for any student intending to attend college and especially those who may continue into a scientific, medical, engineering, manufacturing, or technical career. Physics is considered to be the most basic science, with applications to a wide variety of situations and most professional careers. Students will study the interactions between energy and matter. Students explore principles of fluids, thermodynamics, electricity, magnetism, optics, and topics in modern physics such as atomic and nuclear physics. Laboratory experiments will be a major part of this course..

**Physical Science A/B****HIM130/131**

03-159-S-050-00 (A)

03-159-S-050-00 (B)

Open to 9-10-11-12

2 credits

Through the use of sign language, students will study the solid earth, the oceans, the atmosphere, weather patterns, outer space, and conservation of resources. Problem solving related to these topics will be explored.

**Biology A/B****HIM230/231**

03-151-S-050-00 (A)

03-151-S-050-00 (B)

Open to 9-10-11-12

2 credits

Through the use of sign language, students will be studying living things and the interrelatedness of man, plants, animals and the environment. Students will also study good health practices, human body systems, common diseases, sexuality, physical fitness and wellness, nutrition, chemical dependencies and problem solving related to topics studied.

**Earth Science A/B****HIM330/331**

03-001-S-050-00 (A)

03-001-S-050-00 (B)

Open to 9-10-11-12

2 credits

Students will study ecology, current trends in environmental issues, recycling, conservation of resources, safe environment shopping, weather patterns and problem solving using sign language.

Participation in Life Centered Curriculum Courses is determined through an IEP team decision. The Course of Study within the IEP defines graduation requirements based on individual needs.

**Science for Life I, II, III A/B**

03-202-S-050-00 (A)

03-202-S-050-00 (B)

03-202-S-050-00 (A)

03-202-S-050-00 (B)

03-202-S-050-00 (A)

03-202-S-050-00 (B)

Open to 9-10-11-12

**LCC122/123****LCC222/223****LCC322/323**

2 credits

In this series of courses students will conduct investigations and gather evidence to explain scientific phenomena in biology, physical science, and earth and space science. Students will engage in three-dimensional learning to include science and engineering practices, disciplinary core ideas, and cross-cutting concepts. Students will construct explanations and use models to evaluate scientific evidence across the three domains of science.

# Social Sciences

	Course Title	9	10	11	12		Credits	Recommended Prerequisite
SOC310/311	U.S. History A/B	X					2	
SOC600/601 SOC060/061	U.S. History A/B Individualized U.S. History A/B	X					2	
SOC330/331	Adv U.S. History A/B	X					2	
SOC410/411	AP U.S. History A/B			X	X		2	Yes
SOC215/216	World History A/B		X				1	
SOC700/701 SOC070/071	World History A/B Individualized World History A/B		X				1	
SOC212/213	Adv. World History/ WCSSD Pre-IB	X	X				2	
SOC222	International Relations		X	X	X		1	
SOC225	Arab-Israeli Conflict		X	X	X		1	
SOC304	African American History & Culture		X	X	X		1	
SOC306	Psychology I: Perspectives in Psychology			X	X		1	
SOC337	Psychology II: Psychological Disorders & Personality			X	X		1	Yes
SOC307	Sociology			X	X		1	
SOC312	Economics			X	X		1	
SOC801 SOC081	Economics Individualized Economics			X	X		1	
SOC315	Contemporary Affairs			X			1	
SOC802 SOC082	Contemporary Affairs Individualized Contemporary Affairs			X			1	
SOC317	Advanced Contemporary Affairs			X			1	
SOC325	Geography		X	X	X		1	
SOC339	Laws, Order, and Society		X	X	X		1	
SOC415	U.S. Government				X		1	
SOC800 SOC080	U.S. Government Individualized U.S. Government				X		1	
SOC417/418	AP U.S. Government A/B				X		2	Yes
SOC320	Introduction to Sociology *			X	X		1	Yes
SOC321	Western Civilization I: Ancient & Medieval *			X	X		1	Yes
SOC326	Introduction to Psychology *			X	X		1	Yes
SOC327	Western Civilization III: Modern Period *			X	X		1	Yes
HIM120/121	U.S. History (Hearing Impaired)	X	X	X	X		2	
HIM220/221	World Studies (Hearing Impaired)	X	X	X	X		2	
HIM320	Economics (Hearing Impaired)	X	X	X	X		1	
HIM321	U.S. Government (Hearing Impaired)	X	X	X	X		1	
LCC104/105 LCC204/205	Applied Social Sciences I, II A/B	X	X	X	X		2	

\* Concurrent courses with Hawkeye Community College must meet entrance requirements.

The six required credits in Social Sciences for graduation are two credits in United States History, two credits in World History, one credit in Contemporary Affairs, and 1 credit in United States Government. Six, or more, social science credits are required for admission to most colleges and universities. Students in all Social Science courses will work on developing literacy and critical thinking skills to build their skills to be successful in real world situations.

All courses emphasize 21st century skills and literacy development. Instruction is differentiated to meet the needs of all students. The special education service delivery plan outlines services available for students with an Individualized Education Program (IEP).

### **U.S. History A/B**

04-103-G-050-11 (A)

04-103-G-050-21 (B)

**SOC310/311**

### **U.S. History A/B**

**SOC600/601**

### **Individualized U.S. History A/B**

**SOC060/061**

04-103-S-050-00 (A)

04-103-S-050-00 (B)

Open to 9

2 credits

Students will study political, cultural and social history and understand how that has determined the present. Studying key people and events, and American life, will be the basis for understanding connections between diverse peoples. Focus will be on the turning points in history and events that have lasting impact on our contemporary lives. First semester covers Reconstruction to New Deal. Second semester covers WWII to 1975. The course will infuse career oriented activities and students will engage in the standards of the Iowa Core Curriculum.

### **Adv U.S. History A/B**

**SOC330/331**

04-103-E-050-10 (A)

04-103-E-050-20 (B)

Open to 9

2 credits

Students will study political, cultural and social history and understand how that has determined the present. Key people and events, and American life, will be the basis for understanding connections between diverse peoples. Focus will be on the turning points in history and events that have lasting impact on our contemporary lives. First semester covers Reconstruction to New Deal. Second semester covers WWII to 1975. The course will contain more writing components and more in-depth analysis. The course will infuse career oriented activities and students will engage in the standards of the Iowa Core Curriculum.

### **AP U.S. History A/B**

**SOC410/411**

04-104-H-050-10 (A)

04-104-H-050-20 (B)

Open to 11-12

2 credits

*All students interested in history are encouraged to consider taking this course.*

Students will develop the analytical skills and factual knowledge necessary to deal critically with problems and issues in American history and to qualify students for college credit or placement. The course presents a basic chronological approach with an emphasis on dominant themes, which permeate the history of the United States. The general format of the class emphasizes discussion, essay writing, textbook readings and tests. Students are encouraged to take the National Advanced Placement History test. Students will engage in the standards of the Iowa Core Curriculum.

### **World History A/B**

04-051-G-050-10

04-051-G-050-20

**SOC215/216**

### **World History A/B**

**SOC700/701**

### **Individualized World History A/B**

**SOC070/071**

04-051-S-050-00

04-051-S-050-00

Open to 10

2 credits

Students will study cultural areas of the world from a chronological perspective. They will relate historical and geographical information to contemporary situations. World History A covers ancient civilizations through the Middle Ages. World History B covers the French Revolution through the Russian Revolution. The course will infuse career oriented activities and students will engage in the standards of the Iowa Core Curriculum.

### **Advanced World History A/B**

**SOC212/213**

Open to 10

2 credits

### **WCSD Pre-IB Adv. World History A/B**

Open to 9-10

2 credits

04-051-E-050-10 (A)

04-051-E-050-20 (B)

Students who choose to engage in a more fast-paced and rigorous World History course are encouraged to take Advanced World History. Students will develop advanced literacy and thinking skills that will prepare them for the rigor of college courses. They will be covering world history from the ancient civilizations to 1975. The course will infuse career oriented activities and students will engage in the standards of the Iowa Core Curriculum. In preparation for IB, students will learn to study independently, do research, take notes, make generalizations, and draw conclusions about history. Success in this course requires strong self-motivations.

### **International Relations**

**SOC222**

04-155-G-050-00

Open to 10-11-12

1 credit

If you have a sense of adventure, like solving problems, enjoy learning about other countries/cultures, and would like to travel or work internationally someday, then this is the class for you. Investigate international careers and solve major problems facing the world including: chemical weapons, nuclear weapons, environmental catastrophes, the Syrian Civil War, abuse of women, massive epidemics, and the rights of the disabled. You will be transformed into a delegate representing countries from around the world, as you attempt to beg, borrow, and deal (steal?) for the country. In April, attend the Model United Nations conference at UNI with others in your class, as you put all of your plans into action. You will work face-to-face with likeminded delegates from across the state of Iowa.

### **Arab-Israeli Conflict**

**SOC225**

04-156-G-050-20

Open to 10-11-12

1 credit

Have you ever wanted to run your own country? Plan a nuclear war? Take over the world perhaps? Bring countries together to



solve problems and make peace? The Arab-Israeli Conflict is just the class for you. In this class, you will learn about the history behind the Middle East and spontaneous events across the world. You will learn about all of the key elements in controlling your own country. Playing the part of a current world leader, you will arrange military personnel, form secret alliances with other countries, and stop at nothing to see that your country succeeds in their own journey throughout this simulation. From action forms to press releases, you can change the course of the simulation with just one click of a button. The future of the world is at your very fingertips with Arab-Israeli Conflict. **This class will meet the Contemporary Affairs graduation requirement.**

### **African American History and Culture**

**SOC304**

04-107-G-050-00

Open to 10-11-12

1 credit

Interested in how African Americans shaped our history? Want to know more than just the contributions of Dr. Martin Luther King? Go beyond the Civil Rights Movement, as you explore African American culture, the African American perspective, and how African Americans shaped our history and our country.

### **Psychology I: Perspectives in Psychology**

**SOC306**

04-254-G-050-00

Open to 11-12

1 credit

Many people associate Psychology with Psychologists and the treatment of individuals with emotional or mental health problems. However, there are many different topics and careers associated with the study of Psychology. In this course, students will learn about the different psychological approaches such as: Behaviorism, Psychodynamics, Humanistic, Cognitive, Biological, and Sociocultural. Topics include Sleep and Dreams, Brain Function, The Developing Human, Sensation, Perception, Gender and more. Even if you're not interested in becoming a psychologist, having a good understanding of the human mind and behavior will serve you well in any career. Psychology is about the connection between the mind and the body, and the combination of people's thoughts, feelings, and actions.

### **Psychology II: Psychological Disorders & Personality**

**SOC337**

04-255-G-050-00

Open to 11-12

1 credit

*Recommended: Psychology I*

Have you ever wondered what makes people who they are? Are you curious as to what interferes with a person's ability to function in a healthy way? In this course students will study psychological disorders and how they impact the way people think, feel, and behave in society. Students will discover different theories describing our personalities, and will look at the reasoning behind what motivates behavior. As a part of this, students will learn how to assess, diagnose, and offer treatments to people suffering from mental illnesses. Topics range from anxiety disorders to schizophrenia, to depression, to violent behavior. Not only will this help prepare for careers in Psychology/Psychiatry, but will also offer an understanding of people and their mental health issues, which can assist in any career as well as personal relationships. It is encouraged that students take Psychology I prior to enrollment, but is not required.

### **Sociology**

**SOC307**

04-258-G-050-00

Open to 11-12

1 credit

Why do some people commit crimes while others don't? What can be done about poverty and inequality in the United States? Should sports

teams with Indian mascots be allowed? Why is it considered normal to eat puppies in some parts of the world? If you are fascinated by the behavior of others and why we act the way we do, then sociology is for you. Sociology teaches us to answer "what," "how," and "why" about what is going on in our personal lives, our communities, and the world. Sociology challenges your basic assumptions about why people live the way they do. During the semester we frequently examine and discuss current events through a sociological perspective. Students enjoy conducting their own research study in this class. Similar to real-life sociologists, students will have the opportunity to study data from surveys that investigate important issues, attitudes, and experiences.

### **Economics**

**SOC312**

04-201-G-050-00

### **Economics**

**SOC801**

### **Individualized Economics**

**SOC081**

04-201-S-050-00

Open to 11-12

1 credit

Students will learn concepts such as supply and demand, market pricing and government intervention, and be able to relate them to social issues pertinent to their personal lives. The course will cover the history of economics and geopolitical studies. The course will infuse career oriented activities and students will engage in the standards of the Iowa Core Curriculum.

### **Contemporary Affairs**

**SOC315**

04-156-G-050-10

### **Contemporary Affairs**

**SOC802**

### **Individualized Contemporary Affairs**

**SOC082**

04-156-S-050-00

Open to 11

1 credit

Students will study current world events and issues from the United States' perspective. Students will critically analyze background information and events leading to the event/issue and will also consider the geographic influences and multiple perspectives impacting the event/issue. Students will engage in discussions and generate possible outcomes/solutions regarding current world events/issues. The course will have a unit on careers related to social studies. The course will infuse career-oriented activities and students will engage in the standards of the Iowa Core Curriculum.

### **Advanced Contemporary Affairs**

**SOC317**

04-156-E-050-30

Open to 11

1 credit

Students will study current world events and issues from the United States' perspective. Students will critically analyze background information and events leading to the event/issue and will also consider the geographic influences and multiple perspectives impacting the event/issue. Students will engage in discussions and generate possible outcomes/solutions regarding current world events/issues. The course will have a unit on careers related to social studies. The course will infuse career-oriented activities and students will engage in the standards of the Iowa Core Curriculum.

**Geography**

04-001-G-050-00

Open to 10-11-12

**SOC325**

1 credit

Do you enjoy traveling? Do you want to see the world some day? In geography you will have an opportunity to explore the world and all of the great things the world has to offer! In this class students will explore amazing and beautiful places both natural and man-made. We will discover unique cultures of people all over the world. Students will learn how to use maps to plan trips in the United States and around the world. We will even explore great things to do right here in Iowa!

**Laws, Order, and Society**

04-166-G-050-00

Open to 10-11-12

**SOC339**

1 credit

Do you like watching crime shows or police dramas? Are you a fan of Law and Order? What about Law and Order SVU, Criminal Intent? Do you like CSI or NCIS? If you answered yes to any of the questions then this is the class for you. In this class, students will learn about crimes, police officers, investigations, trials, and sentencing those convicted. Students have many opportunities to work in groups to discuss different cases and legal situations. Projects students have completed in the past include: solving a crime, writing a police report, performing forensic tests, participating in a mock trial, creating an ideal prison, and serving on a task force to help reduce different types of crime. Students who want a fun elective or who are interested in a career in the legal field should definitely sign up for this class.

**U. S. Government**

04-151-G-050-00

**SOC415****U.S. Government****SOC800****Individualized U.S. Government****SOC080**

04-151-S-050-00

Open to 12

1 credit

Students will learn the concepts of our national, state, and local governments. They will be guided in developing an appropriate sense of responsible citizenship as participants in our democratic society. Topics covered include all branches of government and the interrelatedness of their functions and experiences to show students how government affects their daily life and how they can affect government. The course will infuse career oriented activities and students will engage in the standards of the Iowa Core Curriculum.

**AP U.S. Government A/B**

04-159-H-050-10

04-159-H-050-20

Open to 12

**SOC417/418**

2 credits

*All students interested in government are encouraged to consider taking this course; teacher recommendation.*

Students will learn the concepts of our national, state, and local governments. They will be guided in developing an appropriate sense of responsible citizenship as participants in our democratic society. Topics covered include all branches of government and the interrelatedness of their functions and experiences to show students how government affects their daily life and how they can affect government. The course will contain more writing components and more in-depth analysis. The course will infuse career oriented activities and students will engage in the standards of the Iowa Core Curriculum.

**Introduction to Sociology**

04-258-C-050-00

Open to 11-12

**SOC320**

1 credit

Hawkeye Community College SOC110

3 credits

*Since this is a course through HCC, students must meet the HCC entrance requirements and complete the registration process.*

This college course surveys the basic principles, concepts, and research findings of social life from small groups to societies. The course examines the range of sociological explanations of various forms of social behavior and establishes a basis for further study in the field. This course will focus on the sociological perspective and its use in analysis of group behavior, examine and apply the main theoretical perspectives used by sociologists, review the use of the scientific method in gathering data and drawing inferences about social behavior, review the basic sociological concepts of culture, social structure, and socialization, examine the concepts of social diversity and social inequality, consider the structure and interdependence of the basic social institutions, and examine the process of social change. Students will be introduced to basic theories and knowledge of group behavior through lecture and reading.

**Western Civilization I: Ancient & Med**

04-060-C-050-00

Open to 11-12

**SOC321**

1 credit

Hawkeye Community College HIS117

3 credits

*Since this is a course through HCC, students must meet the HCC entrance requirements and complete the registration process.*

Western Civilization I traces the development of Western civilization from prehistory to the end of the High Middle Ages. The role of the Humanities is emphasized. The course explores major political, social, economic, scientific, intellectual, cultural, and religious developments contributing to Western society. These include the significant events and contributions of early Middle Eastern civilizations, classical and Hellenistic Greece, the Roman Empire, its successors, the rise of the Western Christian Church, and Medieval Europe. This course will identify the significance of important people, places, and terms in Western history from the beginnings of ancient civilizations to the age of absolutism, recognize the inter-relatedness of politics, economics, society, religion, and culture in human history to the early modern period, create awareness of areas of geographical importance in Western history, recognize the variety of philosophical and religious traditions that have influenced Western Civilization, develop an appreciation of cultural contributions to Western Civilization deriving from the visual arts, theatre, and music, and recognize the variety and multitude of contributors to our present society.

**Introduction to Psychology**

04-254-C-050-00

Open to 11-12

Hawkeye Community College PSY111

Since this is a course through HCC, students must meet the HCC entrance requirements and complete the registration process.

This college course provides an introduction to the study of behavior with emphasis in the areas of learning, cognition, motivation, personality, behavioral disorder, therapy, and social influence. An understanding of the impact of theoretical perspectives and experimental evidence on the formation of the science of human behavior is also stressed. Psychological theories and principals are utilized to explain and predict behavior.

**SOC326**

1 credit

3 credits

**Western Civilization III: Modern Period**

04-055-C-050-00

Open to 11-12

Hawkeye Community College HIS119

Since this is a course through HCC, students must meet the HCC entrance requirements and complete the registration process.

Western Civilization III explores the development of Western Civilization, covering the period from the French Revolution until the present. The role of the Humanities is emphasized. The course will examine the major political, social, economic, intellectual, cultural, and religious developments contributing toward Western Society. Included are such major developments as the Industrial Revolution, the French Revolution, Romanticism, European Colonialism, World War I and II, the Cold War, The New European Order, and the World of the 21st Century.

**SOC327**

1 credit

3 credits

**U.S. History A/B**

04-101-S-050-00 (A)

04-101-S-050-00 (B)

Open to 9-10-11-12

Students will study U.S. History from 1877 to present using sign language to present information. Activities include current events (international, national, state, local) cultural diversity and contributions to society; as well as problem solving related to major events of the past, present and future.

**HIM120/121**

2 credits

**World Studies A/B**

04-051-S-050-00 (A)

04-051-S-050-00 (B)

Open to 9-10-11-12

Students will develop an understanding of geography and cultural diversities through the use of sign. Current events in the world will be discussed and related to the everyday lives of the students.

**HIM220/221**

2 credits

**Economics**

04-201-S-050-00

Open to 9-10-11-12

Students will study consumer-decision making strategies, budgets, wise buying with credit, loans, insurance, banking and tax skills necessary for the student's success through the use of sign language.

**HIM320**

1 credit

**U.S. Government**

04-151-S-050-00

Open to 9-10-11-12

Students will learn the basic structure of government at all levels and how government affects their daily lives now and in the future. Emphasis will be on their rights and responsibilities.

**HIM321**

1 credit

Participation in Life Centered Curriculum Courses is determined through an IEP team decision. The Course of Study within the IEP defines graduation requirements based on individual needs.

**Applied Social Sciences I, II A/B**

04-305-S-050-00 (A)

04-305-S-050-00 (B)

04-305-S-050-00 (A)

04-305-S-050-00 (B)

Open to 9-10-11-12

In this series of courses students will focus on aspects of geography, government, the behavioral sciences, and current events as they relate to community life, independent living, and employment. Students will learn skills to navigate the school and community environment. Modes of transportation to access these locations will be learned and explored. Students will learn about the local government and responsible citizenship. Skills that lead to positive relationships will be practiced. Class activities will promote positive social conversation and interactions. Learning to comply with directions and accept personal responsibilities will be a focus. Students will gain knowledge of local, state, and national current events. Current events will be used to determine cause and effect and to determine possible outcomes or solutions.

**LCC104/105****LCC204/205**

2 credits

# Specialized Offerings

	Course Title	9	10	11	12		Credits	Recommended Approval
CAR105	C <sup>3</sup> Foundations	X					1	
	<i>EXPANDED LEARNING PROGRAM</i>							
LEA100/101	Expanded Learning Program A/B	X	X	X	X		2	Yes
	<i>DRIVER EDUCATION</i>							
DRI100/101	Driver Education	X	X	X	X		1	Driver's permit
DRI102	Driver Education Summer	X	X	X	X		1	Driver's permit
LEA402	Leadership Development Program I		X	X	X		1	
LEA403	Leadership Development Program II		X	X	X		1	Yes
CAR210/211	I-JAG A/B (East)	X	X	X	X		1	
HIM600/601 HIM700/701 HIM800/801 HIM900/901	Essential Skills Development (Hearing Impaired)	X	X	X	X		2	
SKI100/101 SKI010/011	Strategies A/B Individualized Strategies A/B	X	X	X	X		1-2	
LCC110/111	Employability in the 21st Century	X	X	X	X		2	

All courses emphasize 21st century skills and literacy development. Instruction is differentiated to meet the needs of all students. The special education service delivery plan outlines services available for students with an Individualized Education Program (IEP).

## C<sup>3</sup> Foundations

22-152-G-050-00

Open to 9

## CAR105

1 credit

**This is a required course for 9th grade students.** The Expanded Learning Program, JROTC, ELL C<sup>3</sup> Foundations, and Strategies courses also meet the requirement for C<sup>3</sup> Foundations. It is highly recommended that very careful consideration be given prior to enrolling in one of these three courses that takes the place of C<sup>3</sup> Foundations.

The course includes 21st Century concepts and skills in the areas of career choices, employability, financial literacy and high school orientation. Students will match their interest and aptitudes to career options with a focus on using employment information effectively, acquiring and improving employability skills that allow people to gain, remain and advance in the workplace as well as in society. Students will use technology to enhance their class projects. Students will be expected to demonstrate money management and make informed, responsible financial decisions. Students will review and update their career plan and explore pathway options (liberal arts, CTE, and IB). Students will gain an understanding of working in a global society.

## Expanded Learning Program A/B

22-101-H-050-10 (A)

22-101-H-050-20 (B)

Open to 9-10-11-12

## LEA100/101

2 credits

*Recommended: Identified for Expanded Learning Program services, enrolled in Advanced English 9 or 10, Advanced Placement courses, Post Secondary enrollment, and/or instructor approval*

This class is especially designed to meet the needs of gifted and talented learners. ELP offers the opportunity to extend and apply discussion, research, production, and critical thinking skills.

This class emphasizes the development of independent, lifelong learners. Students will design and complete investigations and/or in-depth studies based on personal interests. Upper class students have the opportunity to participate in internships. Grades are assigned. The pass/no credit option is available. Students may select the course each semester all four years. **When the Expanded Learning course is taken as a 9th grader, the requirement of the C<sup>3</sup> Foundations credit is met.**

**Driver Education**

08-152-G-050-00

Open to 9-10-11-12

1 credit

The Waterloo Community School District has contracted services to provide Driver Education instruction to students. This is a comprehensive course that includes classroom instruction and actual driving experience for one semester. Students must have their instruction permit at the beginning of the course. Students and parents must understand that state law mandates strict attendance and classroom/driving hours. Students must pass each phase of the course in order to complete the course. There is a fee assessed to the driver education students. This fee is set by the company and reviewed by the Board of Education each year. Payment for the course is due the first day of class. There is a one-time pro-rated fee reduction/waiver for those students eligible for free/reduced lunch fee.

**DRI100/101****Leadership Development Program I**

22-101-G-050-30

Open to 10-11-12

1 credit

This course is designed to develop leadership skills and abilities. Students participate in activities focusing on the individual, group teamwork, and community leadership. As a result of this course, students develop qualities necessary to be effective leaders both in school and in the community.

**LEA402****Leadership Development Program II**

22-101-G-050-40

Open to 10-11-12

1 credit

*Recommended: Leadership I*

This course is designed to build on the leadership skills developed in Leadership I. The focus is on expanding students' knowledge of the role a leader plays within a school, community, and the country at large. The framework for this course is the Ten Pillars of Leadership combined with practical leadership experiences. Enrollment is limited; students must apply to be considered for this course.

**LEA403****I-JAG A/B (East)**

22-151-G-050-10

22-151-G-050-20

Open to 9-10-11-12

1 credit

Iowa Jobs for America's Graduates is a course that focuses on leadership, teambuilding, and career-skills. The class includes (1) a career association - a student run organization that plans events and maintains its own governing body, (2) job-shadowing - choose a career association - a student run organization that plans events and maintains its own governing body, (2) job-shadowing - choose a career field and shadow a person in that field for a day, (3) guest speakers - listen to professionals from various career fields and educational institutions, and (4) leadership development conference - student elected leaders attend the state conference in Des Moines and may possibly attend a National meeting.

**CAR210/211****Essential Skills Development A/B**

22-003-S-050-00

22-003-S-050-00

22-003-S-050-00

22-003-S-050-00

22-003-S-050-00

22-003-S-050-00

22-003-S-050-00

22-003-S-050-00

Open to 9-10-11-12

**HIM600/601****HIM700/701****HIM800/801****HIM900/901**

2 credits

Essential Skills Development is one period a day for students to use sign language as their main mode of communication. Concepts and content from Core classes are supported using sign language.

**Strategies A/B****Individualized Strategies A/B**

22-003-S-050-00 (A)

22-003-S-050-00 (B)

Open to 9-10-11-12

**SKI100/101****SKI010/011**

1-2 credits

*This course is specially designed for students with Individualized Education Plans (IEPs).*

In this course students will learn strategies that can be applied across the curriculum. This may include, but is not limited to, strategies and instruction in the areas of reading, writing, math, employability, self-advocacy, and interpersonal skills. Supports from core curriculum may also be provided. Strategy instruction will be determined using data collection and continual assessment on an individual basis. Students will develop skills and learn to use strategies that apply to their postsecondary expectations in the areas of living, learning, and working.

Participation in Life Centered Curriculum Courses is determined through an IEP team decision. The Course of Study within the IEP defines graduation requirements based on individual needs.

**Employability in the 21st Century**

22-153-S-050-00

22-153-S-050-00

Open to 9-10-11-12

**LCC110/111**

2 credits

Students will participate in the school-based enterprise. Students will apply their knowledge and skills in a "live" business setting where challenges arise daily and interactions with customers are varied. This school-based enterprise helps prepare students to transition from school to work or college by deepening students communication, active listening, critical thinking, collaboration, time management, positive social interactions, and community awareness skills. For many students this school-based enterprise provides them with their first work experience and opportunities to develop critical employability skills. For other students, this school-based enterprise provides an opportunity to build management and leadership skills.

# World Languages



	Course Title	9	10	11	12		Credits	Recommended Prerequisite
FOR100/101	Spanish I	X	X	X	X		2	Yes
FOR160/161	WCSD Pre-IB Spanish I A/B	X					2	Yes
FOR106/206	Compacted Spanish I & II A/B	X					4	Yes
FOR102/103	French I	X	X	X	X		2	Yes
FOR104/105	German I	X	X	X	X		2	Yes
FOR164/165	WCSD Pre-IB German I A/B	X					2	Yes
FOR200/201	Spanish II		X	X	X		2	Yes
FOR260/261	WCSD Pre-IB Spanish II A/B	X	X				2	Yes
FOR202/203	French II		X	X	X		2	Yes
FOR204/205	German II		X	X	X		2	Yes
FOR306/307	WCSD Pre-IB German II A/B	X	X				2	Yes
FOR300/301	Spanish III			X	X		2	Yes
FOR360/361	WCSD Pre-IB Spanish III A/B		X	X			2	Yes
FOR302/303	French III			X	X		2	Yes
FOR304/305	German III			X	X		2	Yes
FOR400/401	Spanish IV			X	X		2	Yes
FOR402/403	French IV				X		2	Yes
FOR404/405	German IV				X		2	Yes

**Native speakers or students transferring into the program with previous language experience are required to take a placement test to determine appropriate course level. Contact your counselor to arrange testing.**

The *National Standards for Foreign Language Learning*, as outlined by the American Council on the Teaching of Foreign Languages (ACTFL), are the basis for the design of each world language course. The “5 Cs” of **Communication, Cultures, Connections, Comparisons, and Communities** describe what students should know and be able to do as a result of world language study.

**Communication:** Students will learn how to communicate in meaningful contexts.

**Cultures:** Students will learn about the practices and products of other cultures from a variety of perspectives.

**Connections:** Students will link their study of the language to their personal lives and academic pursuits.

**Comparisons:** Students will compare their own language and culture to those of other countries.

**Communities:** Students will develop the skills and knowledge to use language outside the classroom and to become lifelong language learners.

World Language entrance (admission) requirements vary from college to college and even within a college, depending on the major and degree. World language requirements may range from 0-4 years. Many colleges also have exit world language requirements, which differ from entrance requirements. Some colleges do not honor Pass/Fail grades because they have a C minimum requirement. The best guidelines for college language entrance/exit requirements are: (1) check with the specific colleges under consideration, and (2) take four consecutive years of the same language with a minimum of a C to ensure compliance with language requirements. Students may enroll in any world language course regardless of their Career Interest Academy selection. Throughout all levels of world language courses, there will be a curricular focus on each career interest area.

In order to fulfill the UNI requirement, students must have maintained a minimum of C- in their high school world language courses and students cannot take a 1<sup>st</sup> or 2<sup>nd</sup> year language course as pass/fail.

## Spanish I

24-052-G-050-10

24-052-G-050-20

Open to 9-10-11-12

## **FOR100/101**

2 credits

*Recommended: Students must successfully complete 8<sup>th</sup> grade Language Arts. Students who have received a C or above in their most recent English course have a better chance of success. Students must successfully complete the first semester to continue to the second semester.*

This course introduces students to the people, language, and cultures of the Spanish speaking world. Students will learn to communicate basic information about themselves and their environment and will develop the fundamentals of speaking, listening, reading, and writing in Spanish.

**WCSD Pre-IB Spanish I A/B****FOR160/161**

06-101-E-050-11

06-101-E-050-21

Open to 9

2 credits

*Recommended: Students must successfully complete 8<sup>th</sup> grade Language Arts. Students who have received a C or above in their most recent English course have a better chance of success. Students must successfully complete the first semester to continue to the second semester.*

WCSD Pre-IB Spanish I is designed with more intensive coverage of the level I curriculum. The pace of this course is accelerated and is intended for students pursuing the International Baccalaureate Diploma Program.

**Compacted Spanish I & II A/B****FOR106/206**

24-052-G-050-10

24-053-G-050-10

Open to 9

4 credits

*Recommended: Students must successfully complete 8<sup>th</sup> grade Language Arts. Student who have received a C or above in their most recent English course have a better chance of success.*

Compacted Spanish compacts four semesters of Spanish (two semesters of Spanish I and two semesters of Spanish II) into three semesters. Students will complete both semesters of Spanish I during the fall semester of this course, the first semester of Spanish II during the spring semester of this course, and the second semester of Spanish II during the summer. **For the student who signs up for this course, summer class will be a priority over sports and vacation plans.** The class will be fast paced and challenging. Students will be expected to do much study and learning on their own. This course introduces students to the people, language, and culture of the Spanish speaking world. Students will learn basic communication and the fundamentals of the Spanish language through the study of vocabulary and grammatical structures. Throughout the course, students will develop their skill in speaking, listening, reading and writing.

**French I****FOR102/103**

24-102-G-050-10

24-102-G-050-20

Open to 9-10-11-12

2 credits

*Recommended: Students must successfully complete 8<sup>th</sup> grade Language Arts. Students who have received a C or above in their most recent English course have a better chance of success. Students must successfully complete the first semester to continue to the second semester.*

This course introduces students to the people, language and cultures of the French speaking world. Students will learn to communicate basic information about themselves and their environment and will develop the fundamentals of speaking, listening, reading, and writing in French.

**German I****FOR104/105**

24-252-G-050-10

24-252-G-050-20

Open to 9-10-11-12

2 credits

*Recommended: Students must successfully complete 8<sup>th</sup> grade Language Arts. Students who have received a C or above in their most recent English course have a better chance of success. Students must successfully complete the first semester to continue to the second semester.*

This course introduces students to the people, language, and the culture of the German speaking world. Students will learn to communicate basic information about themselves and their environment and will develop the fundamentals of speaking, listening, reading, and writing in German.

**WCSD Pre-IB German I A/B****FOR164/165**

24-252-E-050-10

24-252-E-050-20

Open to 9

2 credits

*Recommended: Students must successfully complete 8<sup>th</sup> grade Language Arts. Students who have received a C or above in their most recent English course have a better chance of success. Students must successfully complete the first semester to continue to the second semester.*

WCSD Pre-IB German I is designed with more intensive coverage of the level I curriculum. The pace of this course is accelerated and is intended for students pursuing the International Baccalaureate Diploma Program.

**Spanish II****FOR200/201**

24-053-G-050-10

24-053-G-050-20

Open to 10-11-12

2 credits

*Recommended: Students must have successfully completed both semesters of Spanish I; students must also successfully complete the first semester of Spanish II to continue to the second semester.*

The main objective of the second year course is to expand on the language and culture of Spanish speaking countries by building all skills: speaking, listening, reading and writing.

**WCSD Pre-IB Spanish II A/B****FOR260/261**

24-053-E-050-10

24-053-E-050-20

Open to 9-10

2 credits

*Recommended: WCSD Pre-IB Spanish I*

WCSD Pre-IB Spanish II is designed with more intensive coverage of the level II curriculum. The pace of this course is accelerated and is intended for students pursuing the International Baccalaureate Diploma Program.

**French II****FOR202/203**

24-103-G-050-10

24-103-G-050-20

Open to 10-11-12

2 credits

*Recommended: Students must have successfully completed both semesters of French I; students must also successfully complete the first semester of French II to continue to the second semester.*

The main objective of the second year course is to expand on the language and culture of French speaking countries by building all skills: speaking, listening, reading and writing.

**German II**

24-253-G-050-10

24-253-G-050-20

Open to 10-11-12

2 credits

*Recommended: Students must have successfully completed both semesters of German I; students must also successfully complete the first semester of German II to continue to the second semester.*

The main objective of the second year course is to expand on the language and culture of German speaking countries by building all skills: speaking, listening, reading and writing.

**FOR204/205****German III**

24-254-G-050-10

24-254-G-050-20

Open to 11-12

2 credits

*Recommended: Students must have successfully completed both semesters of German II; students must also successfully complete the first semester of German III to continue to the second semester.*

This course will further expand on the language and culture of German speaking countries by building more complex and involved speaking, listening, reading, and writing skills. Class discussion in German is spontaneous and frequent. Proficiency and refinement of oral and written expression in the language is the major emphasis of the third year course.

**FOR304/305****WCSD Pre-IB German II A/B**

24-253-E-050-10

24-253-E-050-20

Open to 9-10

2 credits

*Recommended: WCSD Pre-IB German I*

WCSD Pre-IB German II is designed with more intensive coverage of the level II curriculum. The pace of this course is accelerated and is intended for students pursuing the International Baccalaureate Diploma Program.

**FOR306/307****Spanish III**

24-054-G-050-10

24-054-G-050-20

Open to 11-12

2 credits

*Recommended: Students must have successfully completed both semesters of Spanish II; students must also successfully complete the first semester of Spanish III to continue to the second semester.*

This course will further expand on the language and culture of Spanish speaking countries by building more complex and involved speaking, listening, reading, and writing skills. Class discussion in Spanish is spontaneous and frequent. Proficiency and refinement of oral and written expression in the language is the major emphasis of the third year course.

**FOR300/301****Spanish IV**

24-055-G-050-10

24-055-G-050-20

Open to 11-12

2 credits

*Recommended: Students must have successfully completed both semesters of Spanish III; students must successfully complete the first semester to continue to the second semester.*

Communication in Spanish is the emphasis of this course. This is achieved through the exploration of contemporary and historical topics. The class is conducted in Spanish; student participation in Spanish is expected.

**FOR400/401****French IV**

24-105-G-050-10

24-105-G-050-20

Open to 12

2 credits

*Recommended: Students must have successfully completed both semesters of French III; students must successfully complete the first semester to continue to the second semester.*

Communication in French is the emphasis of this course. This is achieved through the exploration of contemporary and historical topics. The class is conducted in French; student participation in French is expected.

**FOR402/403****WCSD Pre-IB Spanish III A/B**

24-054-E-050-10

24-054-E-050-20

Open to 10-11

2 credits

*Recommended: WCSD Pre-IB Spanish II.*

WCSD Pre-IB Spanish III is designed with more intensive coverage of the level III curriculum. The pace of this course is accelerated and is intended for students pursuing the International Baccalaureate Diploma Program.

**FOR360/361****French III**

24-104-G-050-10

24-104-G-050-20

Open to 11-12

2 credits

*Recommended: Students must have successfully completed both semesters of French II; students must also successfully complete the first semester of French III to continue to the second semester.*

This course will further expand on the language and culture of French speaking countries by building more complex and involved speaking, listening, reading, and writing skills. Class discussion in French is spontaneous and frequent. Proficiency and refinement of oral and written expression in the language is the major emphasis of the third year course.

**FOR302/303****German IV**

24-255-G-050-10

24-255-G-050-20

Open to 12

2 credits

*Recommended: Students must have successfully completed both semesters of German III; students must successfully complete the first semester to continue to the second semester.*

Communication in German is the emphasis of this course. This is achieved through the exploration of contemporary and historical topics. The class is conducted in German; student participation in German is expected.

**FOR404/405**







# Careers and Career Clusters

## What are career clusters?

Career clusters are broad career areas that contain multiple career pathways and employment possibilities. The 16 major clusters are listed below. More information about these can be found at the website listed below. Information about careers and specific career pathways developed between the Waterloo High Schools and Hawkeye Community College can be found under *Career Planning* on the Waterloo Community School District website listed below.

**Waterloo Schools website:**

**[www.waterlooschools.org](http://www.waterlooschools.org)**

**Career Clusters website:**

**[www.careerclusters.org](http://www.careerclusters.org)**

- Agriculture, Food, & Natural Resources
- Architecture and Construction
- Arts, A/V Technology, and Communications
- Business, Management, and Administration
- Education and Training
- Finance
- Government and Public Administration
- Health Science
- Hospitality and Tourism
- Human Services
- Information Technology
- Law, Public Safety, Corrections and Security
- Manufacturing
- Marketing, Sales and Service
- Science, Technology, Engineering, and Mathematics
- Transportation, Distribution, and Logistics

## The 16 Career Clusters

	<p>The production, processing marketing, distribution, financing, and development of agricultural commodities and resources, including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.</p>
	<p>Careers in designing, planning, managing, building and maintaining the built environment.</p>
	<p>Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.</p>
	<p>Careers in this cluster encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. Business Management and Administration career opportunities are available in every sector of the economy.</p>
	<p>Planning, managing and providing education and training services, and related learning support services.</p>
	<p>Planning, services for financial and investment planning, banking, insurance, and business financial management.</p>

the 16 Career Clusters continued.....

 <p><b>Government &amp; Public Administration</b></p>	<p>Executing governmental functions to include Governance; National Security; Foreign Service; Planning; Revenue and Taxation; Regulation; and Management and Administration at the local, state, and federal levels.</p>
 <p><b>Health Science</b></p>	<p>Planning, managing, and providing therapeutic services, diagnostic services, health information, support services, and biotechnology research and development.</p>
 <p><b>Hospitality &amp; Tourism</b></p>	<p>Hospitality and Tourism encompasses the management, marketing and operations of restaurants and other foodservices, lodging, attractions, recreation events, and travel related services.</p>
 <p><b>Human Services</b></p>	<p>Preparing individuals for employment in career pathways that relate to families and human needs.</p>
 <p><b>Information Technology</b></p>	<p>Building linkages in Information Technology Occupations Framework: for entry level, technical, and professional careers related to design, development support and management of hardware, software, multimedia, and systems integration services.</p>
 <p><b>Law, Public Safety, Corrections &amp; Security</b></p>	<p>Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.</p>
 <p><b>Manufacturing</b></p>	<p>Planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.</p>
 <p><b>Marketing, Sales &amp; Service</b></p>	<p>Planning, managing, and performing marketing activities to reach organizational objectives.</p>
 <p><b>Science, Technology, Engineering &amp; Mathematics</b></p>	<p>Planning, managing, and providing scientific research and professional and technical services (e.g. physical science, social science, engineering) including laboratory and testing services, and research and development services.</p>
 <p><b>Transportation, Distribution &amp; Logistics</b></p>	<p>Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.</p>

A Career Cluster is a method of organizing programs by consolidating our Career & Technical Education offerings into pathways.

A Career Pathway is a series of educational & training programs focusing on higher education and employment in a given industry or occupation.



**Pathway: Education and Training**  
**Plan of Study: Teacher Training**

**Career Goal:** Planning, managing and providing education and training services, and related learning support services.

Suggested High School Courses					
9th	Core Academic Courses*:	English 9 or Advanced English 9, Algebra I or Geometry, Physical Science or Biology, US History, Physical Education and C <sup>3</sup> Foundations	<b>Suggested Electives:</b> Consumer Services Pathway Personal Finance Intro to Entrepreneurship		
	Career Path-Courses:	FCS120 Introduction to FCS			
10th	Core Academic Courses*:	English 10 or Advanced English 10, Algebra II or Geometry, Biology or Science Electives, World History or Advanced World History, Physical Education	<b>Suggested Electives:</b> Consumer Services Pathway Personal Finance Intro to Entrepreneurship		
	Career Path-Courses:	CAR336 Exploring PK-12 Education			
11th	Core Academic Courses*:	Am Lit/Comp or Adv. Am Lit & Composition Course or AP Lang/Comp, Algebra II or Geometry or Math Elective, Science Elective, Contemporary Affairs or Adv. Contemporary Affairs, Economics, Physical Education	<b>Suggested Electives:</b> Introduction to Psychology Consumer Services Pathway Personal Finance Intro to Entrepreneurship		
	Career Path-Courses:	CAR330 Multicultural Practices in the Classroom, CAR334 Educational Technology in the Classroom			
12th	Core Academic Courses*:	English Electives, U.S. Government, Economics (if not taken in 11th), Physical Education, Math Elective courses are recommended	<b>Suggested Electives:</b> Consumer Services Pathway Personal Finance Intro to Entrepreneurship		
	Career Path-Courses:	Internship ( Service Learning)			
Secondary to Postsecondary Linkages & Certifications					
<b>Postsecondary Credit Options:</b> Hawkeye Community College, University of Northern Iowa					
<b>Industry Recognized Certificate(s) or License(s)</b>					

This section shows the offerings to advanced learning with this occupational pathway.

Postsecondary Programs Available in Iowa			Entrance Exams/Requirements
Certificate	Early Childhood Group Leader	<a href="http://www.waterlooschools.org">www.waterlooschools.org</a> and the Iowa Community College System	High School Diploma
	Early Childhood Director	<a href="http://www.hawkeyecollege.edu">www.hawkeyecollege.edu</a>	High School Diploma/GED

\$ = \$15-25,000; \$\$ = \$25-55,000; \$\$\$ = \$55-90,000; \$\$\$\$ = Above \$90,000

Extended Learning Experiences			
<b>Curricular Experiences:</b> National Honor Society Future Education Association	<b>Extracurricular Experiences:</b> School Newspaper Student Government	<b>Cluster Overview:</b> the Education and Training Career Cluster prepares students for careers in planning, managing and providing education and training services, and related learning	
<b>Work-Based Learning Experiences:</b> Career Preparation-paid and unpaid, job shadowing		<b>Program Accreditation and/or Professional Association(s):</b> National Education Association PHI DELTA KAPPA International	
<b>Service Learning Experiences:</b> Examples: Before/After-School Aide, Community Service Volunteer			
Career Options:		Salary Range:	
Certificate	Teacher Assistant, Educational Aide I	\$	
Assoc. Degree	After-School Program Supervisor, Assistant Teacher	\$-\$	
Bachelor Degree	Secondary School Teacher, Elementary/Middle/High School Teacher, Special Education Teacher	\$\$	
Graduate	Postsecondary Teacher, Adult Educator, University Instructor/Professor	\$\$\$-\$\$\$\$	

This section illustrates the education and income relationship.

**Pathway: Comprehensive Studies Program**

**Plan of Study: Liberal Arts**

multiple Academies

**Career Goal:** Multiple options

**Suggested High School Courses**

<b>High School</b> Foreign Language (recommended by four-year colleges)	9 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 9 or Adv. English 9 , Algebra I or Geometry, Earth & Space Science, US History, Physical Education and C <sup>3</sup> Foundations	<b>Suggested Electives:</b> TBD
		<b>Career Path Courses:</b>	Electives in content area of interest	
	10 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 10 or Adv. English 10 , Algebra II or Geometry, Biology, World History or Adv. World History, Physical Education	<b>Suggested Electives:</b> TBD
		<b>Career Path Courses:</b>	Electives that support student interests & postsecondary planning; i.e. performing and fine arts, CTE, world languages, content areas	
	11 <sup>th</sup>	<b>Core Academic Courses*:</b>	Am Lit/Comp or Adv. Am Lit & Composition Course or AP Lang/Comp, Algebra II or Geometry or Math Elective, Physical Science or equivalent, Contemporary Affairs, Adv. Contemporary Affairs, Physical Education	<b>Suggested Electives:</b> TBD
		<b>Career Path Courses:</b>	Electives that support student interests & postsecondary planning; i.e. performing and fine arts, CTE, world languages, content areas	
	12 <sup>th</sup>	<b>Core Academic Courses*:</b>	English Electives, U.S. Government, Economics (if not taken in 11th), Physical Education, Math Elective, Science Elective courses are recommended	<b>Suggested Electives:</b> TBD
		<b>Career Path Courses:</b>	Electives that support student interests & postsecondary planning; i.e. performing and fine arts, CTE, world languages, content areas	

**Secondary to Postsecondary Linkages & Certifications**

<b>Recognition for Advanced Learning</b>	<b>Postsecondary Credit Options:</b> Post Secondary Enrollment Options (PSEO), concurrent courses
	<b>Industry Recognized Certificate(s) or License(s)</b> N/A

		<b>Postsecondary Programs Available in Iowa</b>	<b>Iowa Institutions</b>	<b>Entrance Exams/Requirements</b>
<b>Postsecondary Education</b>	Bachelor Degree	Multiple options available, depending on student interests and choice of major/minor focus	<a href="http://www.uni.edu">www.uni.edu</a> <a href="http://www.uiowa.edu">www.uiowa.edu</a> <a href="http://www.iastate.edu">www.iastate.edu</a> additional universities and colleges	See each school's Admissions website
	Graduate	Multiple options available, depending on student interests and choice of major/minor focus	<a href="http://www.uni.edu">www.uni.edu</a> <a href="http://www.uiowa.edu">www.uiowa.edu</a> <a href="http://www.iastate.edu">www.iastate.edu</a> additional universities and colleges	See each school's Admissions website

**Cluster Overview:**

The Comprehensive Studies Program provides students with an overall, general education foundation that prepares them to be successful in any career and educational choice they might make.

Extended Learning Experiences
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**Curricular Experiences:**

Examples: Inquiry Science, English, Creative Writing, Inquiry Math, Social Sciences, student discussions, communication of ideas in a variety of ways, investigating authors' thinking, reflecting on current world affairs, challenging ideas, research projects, science experiments, etc.

**Extracurricular Experiences:**

Examples: Band, Chorus, Visual Arts, Theater Arts, Athletics, Clubs, Student Government, Pep Clubs, Model United Nations, Debates, etc.

**Work-Based Learning Experiences:**

Multiple options available

**Program Accreditation and/or Professional Association(s):****Service Learning Experiences:**

Multiple options available

Career Options:	Salary Range:
Bachelor Degree	
Graduate	

\* \$ = \$15-25,000; \$\$ = \$25-55,000; \$\$\$ = \$55-90,000; \$\$\$\$ = Above \$90,000





## Pathway: International Baccalaureate Diploma Program

### Plan of Study: Advanced Programming

multiple Academies

**Career Goal:** The IB Diploma Program has been designed to address the intellectual, social, emotional and physical well-being of students. The program has gained recognition and respect from the world's leading universities. Students exiting the IB Diploma Program will have a balanced liberal arts understanding.

Suggested HighSchool Courses					
High School	9 <sup>th</sup>	Core Academic Courses*:	WCSD Pre-IB English 9 or WCSD Pre-IB English 10, WCSD Pre-IB Geometry/Adv Geometry and/or WCSD Pre-IB Algebra, WCSD Pre-IB Chemistry/Adv Chemistry and/or WCSD Pre-IB Biology/Adv Biology, WCSD Pre-IB Adv US History, WCSD Pre-IB Sp/Ger I or WCSD Pre-IB Spanish II	Suggested Electives:  ELP 9 WCSD Pre-IB TOK, Visual Art or Theatre Art	
		Career Path Courses:	International Baccalaureate Diploma Program		
	10 <sup>th</sup>	Core Academic Courses*:	WCSD Pre-IB Adv English 10 or AP Eng Lang & Comp, WCSD Pre-IB Adv Algebra II, WCSD Pre-IB Adv Biology/AP Biology and/or WCSD Adv Physics/AP Physics, WCSD Pre-IB Adv World History or AP US World History, WCSD Pre-IB Sp/Ger I or WCSD Pre-IB Spanish III	Suggested Electives:  ELP 10 WCSD Pre-IB TOK, Adv Visual Art or Theatre Art	
		Career Path Courses:	International Baccalaureate Diploma Program		
	11 <sup>th</sup>	Core Academic Courses*:	IB Lang & Lit, IB Lang Acquisition (Sp, Ger), Ind & Societies (History HL, Econ SL/HL), IB Experimental Science (Biology SL, Chemistry SL/HL, Physics HL), IB Mathematics (Math Studies SL or Math SL), IB Arts (Visual Arts or Theatre Arts)	Suggested Electives:  Any elective from the WCSD Course Catalog	
		Career Path Courses:	International Baccalaureate Diploma Program		
	12 <sup>th</sup>	Core Academic Courses*:	IB Lang & Lit, IB Lang Acquisition (Sp, Ger), Ind & Societies (History HL, Econ SL/HL), IB Experimental Science (Biology SL, Chemistry SL/HL, Physics HL), IB Mathematics (Math Studies SL or Math SL), IB Arts (Visual Arts or Theatre Arts)	Suggested Electives:  Any elective from the WCSD Course Catalog	
		Career Path Courses:	International Baccalaureate Diploma Program		
Secondary to Postsecondary Linkages & Certifications					
Recognition for Advanced Learning	Postsecondary Credit Options: The IB Diploma Program is an academically challenging and balanced program with final exams that prepares students, aged 16 to 19, for success at a university and life beyond.				
	Universities all over the world recognize IB courses. Students complete May exams their senior year that determine course recognition. The liberal arts approach of the IB Diploma Program could provide enough credits to start college at a sophomore status depending on student marks and university recognition.				
		Postsecondary Programs Available in Iowa		Iowa Institutions	Entrance Exams/ Requirements
Postsecondary Education	Bachelor Degree	The IB Program would prepare you for any Bachelor Degree		<a href="http://www.uni.edu">www.uni.edu</a> <a href="http://www.uiowa.edu">www.uiowa.edu</a> <a href="http://www.iastate.edu">www.iastate.edu</a>	See each school's Admissions website
	Graduate	The IB Program would prepare you for any Graduate Degree		<a href="http://www.uni.edu">www.uni.edu</a> <a href="http://www.uiowa.edu">www.uiowa.edu</a> <a href="http://www.iastate.edu">www.iastate.edu</a>	See each school's Admissions website

<b>Cluster Overview:</b> The Diploma Program prepares students for success in higher education and life in a global society.		
Extended Learning Experiences		
<b>Curricular Experiences:</b> IB Diploma Program students must choose one subject from each of five groups (1 to 5), ensuring breadth of knowledge and understanding in their primary language, additional language(s), the social sciences, the experimental sciences and mathematics. Students may choose either an arts subject from group 6, or a second subject from groups 1 to 5.		<b>Extracurricular Experiences:</b> Students may choose either an arts subject from group 6, or a second subject from groups 1 to 5. IB Diploma students participate in the Theory of Knowledge course in the spring of their junior year and fall of their senior year. In addition to the six IB courses, and TOK, IB Diploma students can select any extracurricular from the WCSD Course Catalog to compliment their high school experience.
<b>Work-Based Learning Experiences:</b> IB Diploma students reflect on their outside of school experiences through CAS-Creativity, Activity, and Service entries. The three strands of CAS enhance students’ personal and interpersonal development through experiential learning and reflection.		<b>Program Accreditation and/or Professional Association(s):</b>
<b>Service Learning Experiences:</b> CAS-Creativity, Activity, and Service work and reflective practice are entered through an on-line log over the two year IB DP.		
Career Options:		Salary Range:
Bachelor Degree	Top areas of interest for IB graduates/examples of careers beyond college: Humanitarian Aid: Director of the World Food Program Business Administration	\$\$\$-\$\$\$\$
Graduate	Global Humanitarian Organization: Founder of Action Against Hunger Social entrepreneur: Founder of African Clean Energy Medicine and Dentistry	\$\$\$-\$\$\$\$

\* \$ = \$15-25,000; \$\$ = \$25-55,000; \$\$\$ = \$55-90,000; \$\$\$\$ = Above \$90,000





## Pathway: Comprehensive Studies Program

### Plan of Study: Performing Arts

multiple Academies

**Career Goal:** A variety of businesses and groups involved in theatrical and musical performances are included in this pathway. Theatrical production companies, for example, coordinate all aspects of producing a play or theater event. Agents represent actors and assist them in finding jobs. Costume design management companies design costumes. Lighting and stage crews handle the technical aspects of productions. Also in this segment are dance studios, schools and halls, which provide places for professional and amateur dancers to practice, perform and learn. Performers of live musical entertainment include musical artists, dance bands, orchestras, jazz musicians and various modern bands. Orchestras range from major professional orchestras with million-dollar budgets to community orchestras often with part-time schedules.

#### Suggested High School Courses

<b>High School</b> Foreign Language (recommended by four-year colleges)	9 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 9 or Adv. English 9 , Algebra I or Geometry, Earth & Space Science, US History, Physical Education and C <sup>3</sup> Foundations	<b>Suggested Electives:</b> TBD
		<b>Career Path Courses:</b>	Electives in Music, Visual Arts, Theater Arts, i.e. band, orchestra, chorus, fundamentals of art design, drawing and painting, guitar, musical theater, theater arts, etc.	
	10 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 10 or Adv. English 10 , Algebra II or Geometry, Biology, World History or Adv. World History, Physical Education	<b>Suggested Electives:</b> TBD
		<b>Career Path Courses:</b>	Electives in Music, Visual Arts, Theater Arts, i.e. band, orchestra, chorus, fundamentals of art design, drawing and painting, guitar, musical theater, theater arts, etc.	
	11 <sup>th</sup>	<b>Core Academic Courses*:</b>	Am Lit/Comp or Adv. Am Lit & Composition Course or AP Lang/Comp, Algebra II or Geometry or Math Elective, Physical Science or equivalent, Contemporary Affairs, Adv. Contemporary Affairs, Physical Education	<b>Suggested Electives:</b> TBD
		<b>Career Path Courses:</b>	Electives in Music, Visual Arts, Theater Arts, i.e. band, orchestra, chorus, photography, guitar, musical theater, theater arts, advanced studio courses, jazz improvisation, music theory, etc.	
	12 <sup>th</sup>	<b>Core Academic Courses*:</b>	English Electives, U.S. Government, Economics (if not taken in 11th), Physical Education, Math Elective, Science Elective courses are recommended	<b>Suggested Electives:</b> TBD
		<b>Career Path Courses:</b>	Electives in Music, Visual Arts, Theater Arts, i.e. band, orchestra, chorus, photography, guitar, musical theater, theater arts, advanced studio courses, jazz improvisation, music theory, etc.	

#### Secondary to Postsecondary Linkages & Certifications

<b>Recognition for Advanced Learning</b>	<b>Postsecondary Credit Options:</b> Post Secondary Enrollment Options (PSEO), concurrent courses			
	<b>Industry Recognized Certificate(s) or License(s)</b> Entertainment Technician Certification Program			
	<b>Postsecondary Programs Available in Iowa</b>		<b>Iowa Institutions</b>	<b>Entrance Exams/Requirements</b>
		TBD	<a href="http://www.waterlooschools.org">www.waterlooschools.org</a>	High School Diploma
		Community College options	<a href="http://www.hawkeyecollege.edu">www.hawkeyecollege.edu</a> <a href="http://www.kirkwood.edu">www.kirkwood.edu</a> additional Community Colleges	High School Diploma/GED

	Bachelor Degree	Multiple options available, depending on student interests and choice of major/minor focus. Bachelors of Arts - Music	<a href="http://www.uni.edu">www.uni.edu</a> <a href="http://www.iowa.edu">www.iowa.edu</a> <a href="http://www.iastate.edu">www.iastate.edu</a> additional universities and colleges	See each school's Admissions website.
	Graduate	Multiple options available, depending on student interests and choice of major/minor focus  Master of Music Artist Diploma (I or II) program	<a href="http://www.uni.edu">www.uni.edu</a> <a href="http://www.iowa.edu">www.iowa.edu</a> <a href="http://www.iastate.edu">www.iastate.edu</a> additional universities and colleges	See each school's Admissions website.

### Cluster Overview:

Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services

### Extended Learning Experiences

#### Curricular Experiences:

Examples: Inquiry Science, English, Creative Writing, Inquiry Math, Social Sciences, Band, Chorus, Theater Arts, learning musical technique, learning about drama techniques, understanding current artists and their works, drama interpretations, performance techniques, etc.

#### Extracurricular Experiences:

Examples: Band and chorus ensembles, dance team, theater arts presentations, jazz band, one-act plays, plays, musicals, marching band, color guard, musical festivals and competitions, debates, marching in parades, concerts, etc.

#### Work-Based Learning Experiences:

Multiple options available

#### Program Accreditation and/or Professional Association(s):

#### Service Learning Experiences:

Multiple options available

### Career Options:

### Salary Range:

Certificate	Audio-Video Operator, Broadcast Technician, Control Room Technician, Light Director, Radio and Television Announcer, Reporter, Researcher, Writer	\$ - \$\$
Associate Degree	Journalist , Light Director, Writer	\$ - \$\$\$
Bachelor Degree	Journalist, Design Director, Editor, Producer, Publisher, Station Manager, Art Director, Writer, Actor, Musician, Teacher	\$\$\$
Graduate	Journalist, Publisher, Producer, Station Manager, Writer, Actor, Musician, Teacher, Professor of Music / Theater	\$\$\$ - \$\$\$\$

\* \$ = \$15-25,000; \$\$ = \$25-55,000; \$\$\$ = \$55-90,000; \$\$\$\$ = Above \$90,000



## Pathway: Arts, A/V Technology & Communications

### Plan of Study: Visual Arts

Arts, Communication & Business Academy

**Career Goal:** A variety of businesses and groups involved in theatrical and musical performances are included in this pathway. Theatrical production companies, for example, coordinate all aspects of producing a play or theater event. Agents represent actors and assist them in finding jobs. Costume design management companies design costumes. Lighting and stage crews handle the technical aspects of productions. Also in this segment are dance studios, schools and halls, which provide places for professional and amateur dancers to practice, perform and learn. Performers of live musical entertainment include musical artists, dance bands, orchestras, jazz musicians and various modern bands. Orchestras range from major professional orchestras with million-dollar budgets to community orchestras often with part-time schedules.

#### Suggested High School Courses

<b>High School</b> Foreign Language (recommended by four-year colleges)	9 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 9 or Adv. English 9 , Algebra I or Geometry, Earth & Space Science, US History, Physical Education and C <sup>3</sup> Foundations	<b>Suggested Electives:</b> TBD
		<b>Career Path Courses:</b>	Electives in Visual Arts, i.e Fundamentals of Art Design, Drawing and Painting, Sculpture and Ceramics, Mixed Media Design, Jewelry Design, courses in Business, Finance, Marketing and Management that support the Visual Arts	
	10 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 10 or Adv. English 10 , Algebra II or Geometry, Biology, World History or Adv. World History, Physical Education	<b>Suggested Electives:</b> TBD
		<b>Career Path Courses:</b>	Electives in Visual Arts, i.e Fundamentals of Art Design, Drawing and Painting, Sculpture and Ceramics, Mixed Media Design, Jewelry Design, Graphic Design, Photography, courses in Business, Finance, Marketing and Management that support the Visual Arts	
	11 <sup>th</sup>	<b>Core Academic Courses*:</b>	Am Lit/Comp or Adv. Am Lit & Composition Course or AP Lang/Comp, Algebra II or Geometry or Math Elective, Physical Science or equivalent, Contemporary Affairs, Adv. Contemporary Affairs, Physical Education	<b>Suggested Electives:</b> TBD
		<b>Career Path Courses:</b>	Electives in Visual Arts, i.e Fundamentals of Art Design, Drawing and Painting, Sculpture and Ceramics, Mixed Media Design, Jewelry Design, Graphic Design, Photography, Advanced Studio Courses, courses in Business, Finance, Marketing and Management that support the Visual Arts	
	12 <sup>th</sup>	<b>Core Academic Courses*:</b>	English Electives, U.S. Government, Economics (if not taken in 11th), Physical Education, Math Elective, Science Elective courses are recommended	<b>Suggested Electives:</b> TBD
		<b>Career Path Courses:</b>	Electives in Visual Arts, i.e Fundamentals of Art Design, Drawing and Painting, Sculpture and Ceramics, Mixed Media Design, Jewelry Design, Graphic Design, Photography, Advanced Studio Courses, courses in Business, Finance, Marketing and Management that support the Visual Arts	

#### Secondary to Postsecondary Linkages & Certifications

<b>Recognition for Advanced Learning</b>	<b>Postsecondary Credit Options:</b> Post Secondary Enrollment Options (PSEO), concurrent courses
	<b>Industry Recognized Certificate(s) or License(s)</b> Adobe Acrobat XI Pro, Adobe Systems Incorporated, Certified Document Imaging Architect, WOW Certified Web Designer Apprentice, Core, World Organization of Webmasters, Adobe Acrobat X Pro, Adobe Acrobat XI Pro, Adobe After Effects CS5, and more.

	Postsecondary Programs Available in Iowa		Iowa Institutions	Entrance Exams/ Requirements
Postsecondary Education Opportunities	Certificate	Graphic Design Program	<a href="http://www.waterlooschools.org">www.waterlooschools.org</a>	High School Diploma
	Associate Degree	Digital Mass Media Graphic Design	<a href="http://www.hawkeyecollege.edu">www.hawkeyecollege.edu</a> <a href="http://www.kirkwood.edu">www.kirkwood.edu</a> additional Community Colleges	High School Diploma/GED
	Bachelor Degree	Bachelors of Fine Arts Bachelors of Arts – Teaching Bachelors of Arts – History Bachelors of Arts- Studio Experience Bachelors of Arts – Graphic Design	<a href="http://www.uni.edu">www.uni.edu</a> <a href="http://www.iowa.edu">www.iowa.edu</a> <a href="http://www.iastate.edu">www.iastate.edu</a> additional universities and colleges	See each school's Admissions website.
	Graduate	Masters of Graphic Design Landscape Architecture	<a href="http://www.uni.edu">www.uni.edu</a> <a href="http://www.iowa.edu">www.iowa.edu</a> <a href="http://www.iastate.edu">www.iastate.edu</a> additional universities and colleges	See each school's Admissions website.

### Cluster Overview:

Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services

### Extended Learning Experiences

#### Curricular Experiences:

Examples: Inquiry Science, English, Creative Writing, Inquiry Math, Social Sciences, producing art pieces in different mediums, digital photography, learning about artists, learning musical technique, understanding current artists and their works, drama interpretations, performance techniques, etc.

#### Extracurricular Experiences:

Examples: Band, chorus, visual arts, theater arts, jazz band, one-act plays, extended plays, musicals, art shows, marching band, color guard, journalism photography, speech competitions, musical festivals and competitions, debates, marching in parades, concerts, etc.

#### Work-Based Learning Experiences:

Multiple options available

#### Program Accreditation and/or Professional Association(s):

#### Service Learning Experiences:

Multiple options available

### Career Options:

### Salary Range:

Certificate	Artist, Commercial Artist, Commercial Photographer: Digital, Still, Video, Film; Fashion Illustrator, Graphic Designer, Interior Designer	\$ - \$\$
Associate Degree	Artist, Commercial Artist, Commercial Photographer: Digital, Still, Video, Film; Commercial/Residential and Home Furnishing Coordinator, Computer Animator, Fashion Designer, Illustrator	\$ - \$\$\$
Bachelor Degree	Artist, Commercial Artist, Computer Animator, Curator and Gallery, Manager, Fashion Designer, Illustrator, Textile Designer	\$\$\$
Graduate	Art Director, Artist, Commercial Artist, Computer Animator, Curator and Gallery Manager, Fashion Designer, Illustrator	\$\$\$ - \$\$\$\$

\* \$ = \$15-25,000; \$\$ = \$25-55,000; \$\$\$ = \$55-90,000; \$\$\$\$ = Above \$90,000



## Pathway: Architecture & Construction

### Plan of Study: Introduction to Construction Trades

Engineering, Technology & Manufacturing Academy

**Career Goal:** Careers in designing, planning, managing, building and maintaining the built environment.

#### Suggested High School Courses

<b>High School</b> Foreign Language (recommended by four-year colleges)	9 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 9 or Adv. English 9 , Algebra I or Geometry, Earth & Space Science, US History, Physical Education and C <sup>3</sup> Foundations	<b>Suggested Electives:</b> Architectural Drafting Mechanical Drafting STEM Pathway
		<b>Career Path Courses:</b>	IND100 Introduction to Technology	
	10 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 10 or Adv. English 10 , Algebra II or Geometry, Biology, World History or Adv. World History, Physical Education	<b>Suggested Electives:</b> Architectural Drafting Mechanical Drafting STEM Pathway
		<b>Career Path Courses:</b>	IND220 Introduction to Residential Construction (CON102) (Double block, 1 semester)	
	11 <sup>th</sup>	<b>Core Academic Courses*:</b>	Am Lit/Comp or Adv. Am Lit & Composition Course or AP Lang/Comp, Algebra II or Geometry or Math Elective, Physical Science or equivalent, Contemporary Affairs, Adv. Contemporary Affairs, Physical Education	<b>Suggested Electives:</b> Architectural Drafting Mechanical Drafting STEM Pathway
		<b>Career Path Courses:</b>	IND350 Intro to Finish Carpentry, IND206 Construction Technology II (Double block, 1 semester)	
	12 <sup>th</sup>	<b>Core Academic Courses*:</b>	English Electives, U.S. Government, Economics (if not taken in 11th), Physical Education, Math Elective, Science Elective courses are recommended	<b>Suggested Electives:</b> Architectural Drafting Mechanical Drafting STEM Pathway
		<b>Career Path Courses:</b>	Construction Internship	

#### Secondary to Postsecondary Linkages & Certifications

<b>Recognition for Advanced Learning</b>	<b>Postsecondary Credit Options:</b> Hawkeye Community College
	<b>Industry Recognized Certificate(s) or License(s)</b> National Center for Career and Construction Research

	Postsecondary Programs Available in Iowa		Iowa Institutions	Entrance Exams/ Requirements
Postsecondary Education Opportunities	Certificate	Carpentry, Fine Woodworking, Construction Technology, Plumbing, Welding, Heating, Vent, Air Conditioning, Refrigeration and Air Conditioning, Electrician Occupations, Electronics Technology, Property Maintenance Technician, Cabinet Making / Millwork, Electric Lines Worker, Computer Aided Drafting & Design (CAD), Glazier Apprenticeship, Painting Apprenticeship, Brick Layer Apprenticeship, Sheet Metal Apprenticeship, Inside Electrician, Industrial Maintenance Technology, Facilities Maintenance Technology	<a href="http://www.waterlooschools.org">www.waterlooschools.org</a> and the Iowa Community College System	High School Diploma
	Associate Degree	Carpentry, Woodworking, Construction Technology, Plumbing, Welding Technology, Heating, Vent, Air Conditioning, Industrial Electrician, Electrical Technology, Computer Aided Drafting & Design (CAD), Facilities Maintenance Technology, Energy Maintenance Technology, Civil Engineering Technology	<a href="http://www.hawkeyecollege.edu">www.hawkeyecollege.edu</a>	High School Diploma/GED

	Bachelor Degree	Geography - Urban Studies & Planning, Construction Management, Architectural Engineering, Architecture, Entrepreneurship and Small Business Management, Engineering Management, Civil, Electrical, Environmental & Mechanical Engineering	<a href="http://www.uni.edu">www.uni.edu</a> <a href="http://www.iowa.edu">www.iowa.edu</a> <a href="http://www.iastate.edu">www.iastate.edu</a>	See each school's Admissions website.
	Graduate	Urban & Regional Planner, MURP, Urban Design, MUD, Architecture, M. Arch., Construction Management, MS, Civil, Environmental, Architectural Engineering, MS, ME, PhD, Engineering Management, MS, PhD, Engineering Management	<a href="http://www.uni.edu">www.uni.edu</a> <a href="http://www.iowa.edu">www.iowa.edu</a> <a href="http://www.iastate.edu">www.iastate.edu</a>	See each school's Admissions website.

**Cluster Overview:** Design/Pre-Construction Pathway: People with careers in design/pre-construction create our future! They turn a concept into a set of plans. Their plans guide other construction professionals as they continue the building process, including laboratory and testing services, and research and development services.

#### Extended Learning Experiences


<b>Curricular Experiences:</b> SkillsUSA And/Or Future Business Leaders of America	<b>Extracurricular Experiences:</b> Student Council Class Officer Drama Productions, set building and lighting and/or acting Speech and Debate
<b>Work-Based Learning Experiences:</b> FBLA Shadow Day Construction Internship in Advanced Construction Maintenance Technology or COE II	<b>Program Accreditation and/or Professional Association(s):</b> American Institute of Contractors, American Welding Society, Associated Builders and Contractors, Associated General Contractors, Construction Management Association, Design Build Institute of America, Mechanical Electrical Contractors of America, National Association of Homebuilders, National Electrical Manufacturers Association, Society of Women in Construction
<b>Service Learning Experiences:</b> Career internship	

#### Career Options:

#### Salary Range:

Certificate	Mason, Millwright, Painter, Paperhanger, Pipe Fitter, Pipe layer, Pipeline Installer, Plasterer/Drywall, Carpenter, Carpet Installer, Concrete Finisher, Construction Craft Laborer, Boilermaker	\$ - \$\$
Associate Degree	Architectural and Civil Drafter, Civil Engineer (structural, geotechnical, transportation, etc.), Civil Engineering Technician, Code Official, Computer Aided Drafter (CAD), Cost Estimator, Drafter, Electrical and Electronic Engineering Technician, Electrical Engineer (electronics, security telecommunications, Environmental Designer, Environmental Engineer (hydro engineering)	\$ - \$\$\$
Bachelor Degree	Administrative Services Managers, Building Inspectors, Cost Estimators, Construction Managers, Environmental Engineers	\$\$\$
Graduate	Environmental Engineers, Civil Engineers, Urban & Regional Planners, Instructors/Professors of Engineering	\$\$\$ - \$\$\$\$

\* \$ = \$15-25,000; \$\$ = \$25-55,000; \$\$\$ = \$55-90,000; \$\$\$\$ = Above \$90,000

			<b>Pathway: Arts and Communication</b>		
			<b>Plan of Study: Digital Graphics</b>		
			Arts, Communication & Business Academy		
<b>Career Goal:</b> Digital Graphics: Graphic Designers will create art to help communicate messages along with the use of technology. A variety of methods from drawing, painting, illustrating and computers will be used. Final products will be created through the printing process. Text and pictures will be transformed into finished pages. Desktop publishing poses new challenges for the printing industry. The printing industry is rapidly moving toward complete “digital imaging,” requiring a vast and technical skill set.					
Suggested High School Courses					
High School  Foreign Language (recommended by four-year colleges)	9 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 9 or Adv. English 9 , Algebra I or Geometry, Earth & Space Science, US History, Physical Education and C <sup>3</sup> Foundations	<b>Suggested Electives:</b> Mixed Media Drawing Processes Color Theory & Painting Accounting I Business Law	
		<b>Career Path Courses:</b>	ART100 Fundamentals of Art or ART104 Mixed Media Design		
	10 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 10 or Adv. English 10, Algebra II or Geometry, Biology, World History or Adv. World History, Physical Education	<b>Suggested Electives:</b> Mixed Media Drawing Processes Color Theory & Painting Accounting I Business Law	
		<b>Career Path Courses:</b>	ART205 Drawing and Composition (GRA105) and COM220 Desktop Publishing (GRA133), COM221 Basic Digital Photography (MMS103)		
	11 <sup>th</sup>	<b>Core Academic Courses*:</b>	Am Lit/Comp or Adv. Am Lit & Composition Course or AP Lang/Comp, Algebra II or Geometry or Math Elective, Physical Science or equivalent, Contemporary Affairs or Adv. Contemporary Affairs, Economics, Physical Education	<b>Suggested Electives:</b> Mixed Media Drawing Processes Color Theory & Painting Accounting I Business Law	
		<b>Career Path Courses:</b>	COM222 Design and Layout (GRA196) and COM223 Graphic Imaging (GRA142)/ENG408 English in a Digital Graphic World, COM221 Basic Digital Photography (MMS103) (if not taken in 10th gr)		
	12 <sup>th</sup>	<b>Core Academic Courses*:</b>	English Electives, U.S. Government, Economics (if not taken in 11th) Physical Education, Math Elective, Science Elective courses are recommended	<b>Suggested Electives:</b> Mixed Media Drawing Processes Color Theory & Painting Accounting I Business Law	
		<b>Career Path Courses:</b>	COM223 Graphic Imaging (GRA142)/English in a Digital Graphic World or Graphic Design Internship or ART312 Print Media		
	Secondary to Postsecondary Linkages & Certifications				
	Recognition for Advanced Learning	<b>Postsecondary Credit Options:</b> Listed above. Hawkeye Community College			
<b>Industry Recognized Certificate(s) or License(s)</b> With the successful completion of the program, a student can earn a Digital Mass Media Certificate from Hawkeye Community College or ACE (Adobe Certified Expert)					
		Postsecondary Programs Available in Iowa		Iowa Institutions	Entrance Exams/ Requirements
Postsecondary Education Opportunities	Certificate	Visual Communication, Web Design, Management Information Systems, Web/Multimedia Management and Webmaster		<a href="http://www.waterlooschools.org">www.waterlooschools.org</a>	High School Diploma
	Associate Degree	Visual Communication, Web Design, Web/Multimedia Management and Webmaster, Commercial and Advertising Art, Animation, Interactive Technology, Video Graphics, and Special Effects, Computer Graphics		<a href="http://www.hawkeyecollege.edu">www.hawkeyecollege.edu</a>	High School Diploma/GED



	Bachelor Degree	Web Design, Management Information Systems, Web/Multimedia Management and Webmaster, Computer Graphics, Commercial and Instructional Designer	<a href="http://www.uni.edu">www.uni.edu</a>	See each school's Admissions website.
	Graduate	Commercial and Advertising Art, Commercial and Instructional Designer	<a href="http://www.uni.edu">www.uni.edu</a>	See each school's Admissions website.


**Cluster Overview:** The Arts and Communication Cluster focuses on designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

#### Extended Learning Experiences

<b>Curricular Experiences:</b> Examples: Yearbook School Website		<b>Extracurricular Experiences:</b> Examples: Yearbook High School Newspaper Senior Video Computer Club	
<b>Work-Based Learning Experiences:</b> Career Preparation-Paid and Unpaid, Job Shadowing, Internships		<b>Program Accreditation and/or Professional Association(s):</b> Examples: Association for Women in Computing International DECA National Future Business Leaders of America Phi Beta Lambda American Institute of Graphic Arts HTML Writers Guild	
<b>Service Learning Experiences:</b> Examples: Boys and Girls Clubs of America, Boy Scouts of America, Community Service Volunteer, Girl Scouts of the USA			
Career Options:			Salary Range:
Certificate	Visual Communication, Web Design, Management Information Systems, Web/Multimedia Management and Webmaster, Office Computer Specialist/Assistant, Graphic Artist		\$ - \$\$
Associate Degree	Visual Communication, Web Design, Web/Multimedia Management and Webmaster, Commercial and Advertising Art, Animation, Interactive Technology, Video Graphics, and Special Effects, Computer Graphics		\$ - \$\$
Bachelor Degree	Web Design, Management Information Systems, Web/Multimedia Management and Webmaster, Computer Graphics, Commercial and Instructional Designer		\$\$-\$\$\$
Graduate	Commercial and Advertising Art, Commercial and Instructional Designer		\$\$ - \$\$\$

\* \$ = \$15-25,000; \$\$ = \$25-55,000; \$\$\$ = \$55-90,000; \$\$\$\$ = Above \$90,000



		<b>Pathway: Arts, A/V Technology &amp; Communications</b>			
		<b>Plan of Study: Digital Mass Media</b>			
		Arts, Communication & Business Academy			
<b>Career Goal:</b> Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.					
Suggested High School Courses					
High School  Foreign Language (recommended by four-year colleges)	9 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 9 or Adv. English 9, Algebra or Geometry, Eath & Space Science, US History, Physical Education, and C <sup>3</sup> Foundations	<b>Suggested Electives:</b> Mixed Media Drawing Processes Color Theory & Painting Accounting I Business Law	
		<b>Career Path Courses:</b>	COM101 Intro to Computers I, COM110 Computer Applications I, COM211 Internet Applications		
	10 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 10 or Adv. English 10, Algebra II or Geometry, Biology, World History or Adv. World History, Physical Education	<b>Suggested Electives:</b> Mixed Media Drawing Processes Color Theory & Painting Accounting I Business Law	
		<b>Career Path Courses:</b>	COM204 Intro to Computer Applications II, COM220 Desktop Publishing (GRA133), COM221 Basic Digital Photography (MMS103), COM205 Intro to Audio Production		
	11 <sup>th</sup>	<b>Core Academic Courses*:</b>	Am Lit/Comp or Adv. Am Lit & Composition Course or AP Lang/Comp, Algebra II or Geometry or Math Elective, Physical Science or equivalent, Contemporary Affairs or Adv. Contemporary Affairs, Economics, Physical Education	<b>Suggested Electives:</b> Mixed Media Drawing Processes Color Theory & Painting Accounting I Business Law	
		<b>Career Path Courses:</b>	COM203 Introduction to Web Design (GRA150), COM210 Intro to Video Production, BUS322 Sports Marketing (MKT198)		
	12 <sup>th</sup>	<b>Core Academic Courses*:</b>	English Electives, U.S. Government, Economics (if not taken in 11th), Physical Education, Math Elective, Science Elective courses are recommended	<b>Suggested Electives:</b> Mixed Media Drawing Processes Color Theory & Painting Accounting I Business Law	
		<b>Career Path Courses:</b>	Digital Mass Media Internship		
	Secondary to Postsecondary Linkages & Certifications				
	Recognition for Advanced Learning	<b>Postsecondary Credit Options:</b> Listed above. Hawkeye Community College			
<b>Industry Recognized Certificate(s) or License(s)</b> With the successful completion of the program, a student can earn a Digital Mass Media Certificate from Hawkeye Community College. Additionally students will be able to earn Microsoft Certification in Word, Excel, and PowerPoint upon successful completion of the certification exam. Also students can earn the National Career Readiness Certificate (NCRC) through Iowa Work Force Development.					
	Postsecondary Programs Available in Iowa		Iowa Institutions	Entrance Exams/ Requirements	
Postsecondary Education Opportunities	Certificate	Visual Communication, Web Design, Web/Multimedia Management and Webmaster, and Graphic Artist	<a href="http://www.waterlooschools.org">www.waterlooschools.org</a>	High School Diploma	
	Associate Degree	Visual Communication, Web Design, Web/Multimedia Management and Webmaster, Commercial Advertising Art, Animation, Interactive Technology, Video Graphics, Special Effects, and Computer Graphics	<a href="http://www.hawkeyecollege.edu">www.hawkeyecollege.edu</a>	High School Diploma/GED	

	Bachelor Degree	Web Design, Management Information Systems, Web/Multimedia Management and Webmaster, Computer Graphics, Commercial and Industrial Designer	<a href="http://www.uni.edu">www.uni.edu</a>	See each school's Admissions website.
	Graduate	Commercial and Advertising Art, Commercial and Instructional Designer, Computer Graphics, and Commercial and Industrial Designer	<a href="http://www.uni.edu">www.uni.edu</a>	See each school's Admissions website.

**Cluster Overview:** Journalism and Broadcasting Pathway: News analysts, reporters and correspondents gather information, prepare stories and make broadcasts that inform us about local, state, national and international events; present points of view on current issues; and report on the actions of public officials, corporate executives, special interest groups and others who exercise power. Broadcast and sound technicians install, test, repair, set up and operate the electronic equipment used to record and transmit radio and television programs, cable programs and motion pictures. Chief engineers, broadcast field supervisors and transmission engineers supervise the technicians who operate and maintain broadcasting equipment.

Extended Learning Experiences		
<b>Curricular Experiences:</b> Yearbook Newspaper		<b>Extracurricular Experiences:</b> Business Professionals of America SkillsUSA School Class Officer
<b>Work-Based Learning Experiences:</b> Career Internship – paid positions around the community Internships Job Shadowing		<b>Program Accreditation and/or Professional Association(s):</b> Iowa Work Force Development Business Professionals of America SkillsUSA
<b>Service Learning Experiences:</b> Examples: Boys and Girls Clubs of America, Boy Scouts of America, Community Service Volunteer, Girl Scouts of the USA		
Career Options:		Salary Range:
Certificate	Visual Communication, Web Design, Web/Multimedia Management and Webmaster, and Graphic Artist	\$ - \$\$
Associate Degree	Visual Communication, Web Design, Web/Multimedia Management and Webmaster, Commercial Advertising Art, Animation, Interactive Technology, Video Graphics, Special Effects, and Computer Graphics	\$ - \$\$\$
Bachelor Degree	Web Design, Management Information Systems, Web/Multimedia Management and Webmaster, Computer Graphics, Commercial and Industrial Designer	\$\$\$
Graduate	Commercial and Advertising Art, Commercial and Industrial Designer	\$\$\$ - \$\$\$\$

\* \$ = \$15-25,000; \$\$ = \$25-55,000; \$\$\$ = \$55-90,000; \$\$\$\$ = Above \$90,000


		<b>Pathway: Business Management and Administration</b>		
		<b>Plan of Study: Business</b>		
Arts, Communication & Business Academy				
<b>Career Goal:</b> Business Essentials: This is a program designed to give students an overview of the Business and Finance Career Cluster occupations. Students will develop an understanding of how academic skills in mathematics, economics, and written and oral communications are integral components of success in these occupations. Students will examine current events to determine their impact on business and industry and legal and ethical behavior, acquire knowledge of safe and secure environmental controls to enhance productivity, determine how resources should be managed to achieve company goals, and identify employability and personal skills needed to obtain a career and be successful in the workplace. As students learn about different types of business ownership, they will interpret industry laws and regulations to ensure compliance, identify principles of business management, and analyze business practices to determine ethics and social responsibilities. This may be taught as a career exploration course in conjunction with other foundation Career Cluster courses.				
Suggested High School Courses				
<b>High School</b>  Foreign Language (recommended by four-year colleges)	9 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 9 or Adv. English 9, Algebra I or Geometry, Earth & Space Science, US History, Physical Education and C <sup>3</sup> Foundations	<b>Suggested Electives:</b> Fundamentals of Oral Communication (HCC) Marketing Pathway Arts , A/V Technology and Communication Pathway Information Technology Pathway
		<b>Career Path Courses:</b>	COM101 Intro to Computers I, COM110 Computer Applications I, COM204 Computer Applications II	
	10 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 10 or Adv. English 10, Algebra II or Geometry, Biology, World History or Adv. World History, Physical Education	<b>Suggested Electives:</b> Fundamentals of Oral Communication (HCC) Marketing Pathway Arts , A/V Technology and Communication Pathway Information Technology
		<b>Career Path Courses:</b>	BUS304 Business Law BUS326 Exploring Business & Marketing Careers	
	11 <sup>th</sup>	<b>Core Academic Courses*:</b>	Am Lit/Comp or Adv. Am Lit & Composition Course or AP Lang/Comp, Algebra II or Geometry or Math Elective, Physical Science or equivalent, Contemporary Affairs or Adv. Contemporary Affairs, Economics, Physical Education	<b>Suggested Electives:</b> Fundamentals of Oral Communication (HCC) Marketing Pathway Arts , A/V Technology and Communication Pathway Information Technology JA Economics
		<b>Career Path Courses:</b>	BUS220 Introduction to Accounting I(ACC115), BUS310 Intro to Business (BUS102), BUS328 Intro to Entrepreneurship	
	12 <sup>th</sup>	<b>Core Academic Courses*:</b>	English Electives, U.S. Government, Economics (if not taken in 11th), Physical Education, Math Elective, Science Elective courses are recommended	<b>Suggested Electives:</b> Fundamentals of Oral Communication (HCC) Marketing Pathway Arts , A/V Technology and Communication Pathway Information Technology JA Economics
		<b>Career Path Courses:</b>	Business Internship, BUS320 Introduction to Accounting II (ACC116)	
Secondary to Postsecondary Linkages & Certifications				
<b>Recognition for Advanced Learning</b>	<b>Postsecondary Credit Options:</b> Listed above. Hawkeye Community College			
	<b>Industry Recognized Certificate(s) or License(s)</b> With the successful completion of the program, a student can earn a Microsoft Officer Certificate in Word, Excel, Powerpoint, and Access as well as the National Career Readiness Certificate through Iowa Work Force Development.			

	Postsecondary Programs Available in Iowa		Iowa Institutions	Entrance Exams/ Requirements
<b>Postsecondary Education Opportunities</b>	Certificate	Microsoft Office Certificates in Word, Excel, PowerPoint, and Access. National Career Readiness Certificate through Iowa Work Force Development.	<a href="http://www.waterlooschools.org">www.waterlooschools.org</a> and the Iowa Community College System	High School Diploma
	Associate Degree	Management Information Systems Business Administration Marketing/Management Sales Accounting	<a href="http://www.hawkeyecollege.edu">www.hawkeyecollege.edu</a>	High School Diploma/GED
	Bachelor Degree	Management Information Systems Business Administration Marketing Sales Management Accounting, Human Resource Management Communication Public Relations	<a href="http://www.uni.edu">www.uni.edu</a>	See each school's Admissions website.
	Graduate	Master in Business Administration Instructional Technology	<a href="http://www.uni.edu">www.uni.edu</a>	See each school's Admissions website.

**Cluster Overview:** General Management focuses on careers that plan, organize, direct, and evaluate all or part of a business organization through the allocation and use of financial, human, and material resources.

Extended Learning Experiences		
<b>Curricular Experiences:</b> Business Professionals of America SkillsUSA School Class Officer		<b>Extracurricular Experiences:</b> Business Professionals of America SkillsUSA School Class Officer
<b>Work-Based Learning Experiences:</b> Career Internship – paid positions around the community Internships Job Shadowing		<b>Program Accreditation and/or Professional Association(s):</b> Iowa Work Force Development Business Professionals of America SkillsUSA
<b>Service Learning Experiences:</b> Examples: Boys and Girls Clubs of America, Boy Scouts of America, Community Service Volunteer, Girl Scouts of the USA		
Career Options:		Salary Range:
Certificate	Office Assistant Data Entry Clerk Customer Service Representative	\$ - \$\$
Associate Degree	Executive Assistant Business Administration Marketing Assistant Sales, Bookkeeper	\$ - \$\$\$
Bachelor Degree	Management Information Systems Business Administration Marketing Sales Management Director of Human Resource Management Communication, Public Relations, Accounting	\$\$\$
Graduate	Master in Business Administration Instructional Technology Chief Executive Officer, Chief Financial Officer	\$\$\$ - \$\$\$\$

\* \$ = \$15-25,000; \$\$ = \$25-55,000; \$\$\$ = \$55-90,000; \$\$\$\$ = Above \$90,000

		<b>Pathway: Education and Training</b>			
		<b>Plan of Study: Teacher Training</b>			
<i>Health and Human Services Academy</i>					
<b>Career Goal:</b> Planning, managing and providing education and training services, and related learning support services.					
Suggested High School Courses					
High School  Foreign Language (recommended by four-year colleges)	9 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 9 or Adv. English 9, Algebra I or Geometry, Earth & Space Science or Biology, US History, Physical Education and C <sup>3</sup> Foundations	<b>Suggested Electives:</b>  Consumer Services Pathway Personal Finance Intro to Entrepreneurship	
		<b>Career Path Courses:</b>	FCS120 Exploring Careers in Human Services		
	10 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 10 or Adv. English 10, Algebra II or Geometry, Biology, World History or Adv. World History, Physical Education	<b>Suggested Electives:</b>  Consumer Services Pathway Personal Finance Intro to Entrepreneurship	
		<b>Career Path Courses:</b>	CAR336 Exploring PK-12 Education		
	11 <sup>th</sup>	<b>Core Academic Courses*:</b>	Am Lit/Comp or Adv. Am Lit & Composition Course or AP Lang/Comp, Algebra II or Geometry or Math Elective, Physical Science or equivalent, Contemporary Affairs or Adv. Contemporary Affairs, Economics, Physical Education	<b>Suggested Electives:</b>  Introduction to Psychology Consumer Services Pathway Personal Finance Intro to Entrepreneurship	
		<b>Career Path Courses:</b>	CAR330 Multicultural Practices in the Classroom, CAR334 Educational Technology in the Classroom		
	12 <sup>th</sup>	<b>Core Academic Courses*:</b>	English Electives, U.S. Government, Economics (if not taken in 11th), Physical Education, Math Elective, Science Elective courses are recommended	<b>Suggested Electives:</b>  Consumer Services Pathway Personal Finance Intro to Entrepreneurship	
		<b>Career Path Courses:</b>	Internship ( Service Learning)		
	Secondary to Postsecondary Linkages & Certifications				
	Recognition for Advanced	<b>Postsecondary Credit Options:</b> Hawkeye Community College, University of Northern Iowa			
<b>Industry Recognized Certificate(s) or License(s)</b>					
	Postsecondary Programs Available in Iowa		Iowa Institutions	Entrance Exams/ Requirements	
Postsecondary Education Opportunities	Certificate	Early Childhood Group Leader Early Childhood Director	<a href="http://www.waterlooschools.org">www.waterlooschools.org</a> and the Iowa Community College System	High School Diploma	
	Associate Degree	Early Childhood Education	<a href="http://www.hawkeyecollege.edu">www.hawkeyecollege.edu</a>	High School Diploma/GED	

	Bachelor Degree	Early Childhood, Teacher Education – Elementary, Teacher Education Secondary, Special Education, Human Performance & Physical Education, Physical Education	<a href="http://www.uni.edu">www.uni.edu</a>	See each school's Admissions website.
	Graduate	Teacher Education, MA; Educational Equity & Cultural Diversity, MA & PhD; Educational Foundations, Policy, Practice, MS & PhD; Education Leadership, MA & PhD; Special Education, MA; Special Education, MA & Ed.D, Human Performance & Physical Education, MA	<a href="http://www.uni.edu">www.uni.edu</a>	See each school's Admissions website.

**Cluster Overview:** The Education and Training Career Cluster prepares students for careers in planning, managing and providing education and training services, and related learning support services, including laboratory and testing services, and research and development services.

#### Extended Learning Experiences

<b>Curricular Experiences:</b> Family, Career and Community Leaders of America National Honor Society National Art Honor Society Future Education Association	<b>Extracurricular Experiences:</b> Language Immersion Programs School Newspaper Speech & Debate Team Student Government Summer-Camp Counselor
<b>Work-Based Learning Experiences:</b> Career Preparation – Paid and Unpaid, Job Shadowing, Internships	<b>Program Accreditation and/or Professional Association(s):</b> National Education Association PHI DELTA KAPPA International Discipline-Specific Professional Association
<b>Service Learning Experiences:</b> Examples: Before/After-School Aide, Campus Service Organizations, Community Service Volunteer, Peer Tutoring / Peer Mentoring	

Career Options:		Salary Range:
Certificate	Teacher Assistant, Educational Aide I	\$
Associate Degree	After-School Program Supervisor, Assistant Teacher, Group Worker/Assistant	\$ - \$\$
Bachelor Degree	Secondary School Teacher, Elementary School Teacher, Middle School Teacher, Recreation Attendant, Adult Educator, County Extension Agent, Career and Technical Education Teacher, Special Education Teacher, Coach	\$\$
Graduate	Postsecondary Teacher, Adult Educator, County Extension Director, University Instructor/ Professor, Secondary Teacher	\$\$ - \$\$\$

\* \$ = \$15-25,000; \$\$ = \$25-55,000; \$\$\$ = \$55-90,000; \$\$\$\$ = Above \$90,000



## Pathway: National Security

**Plan of Study:** Air Force JROTC

Health and Human Services Academy

**Career Goal:** Develop citizens of character dedicated to serving their nation and community.

### Suggested High School Courses

<b>High School</b> Foreign Language (recommended by four-year colleges)	9 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 9 or Adv. English 9, Algebra I or Geometry, Earth & Space Science or Biology, US History, Physical Education and C <sup>3</sup> Foundations	<b>Suggested Electives:</b> Drill & Ceremony Class
		<b>Career Path Courses:</b>	First Year AS/LE-10X: AS-100: A Journey into Aviation History LE-100: Citizenship, Character & AF Tradition	
	10 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 10 or Adv. English 10, Algebra II or Geometry, Biology or Science Electives, World History or Adv. World History, Physical Education	<b>Suggested Electives:</b> Drill & Ceremony Class
		<b>Career Path Courses:</b>	Second Year AS/LE-20X AS-200: The Science of Flight: A Gateway to New Horizons LE-200: Communications, Awareness, and Leadership	
	11 <sup>th</sup>	<b>Core Academic Courses*:</b>	Am Lit/Comp or Adv. Am Lit & Composition Course or AP Lang/Comp, Algebra II or Geometry or Math Elective, Physical Science or equivalent, Contemporary Affairs or Adv. Contemporary Affairs, Economics, Physical Education	<b>Suggested Electives:</b> Drill & Ceremony Class
		<b>Career Path Courses:</b>	Third Year AS/LE-30X AS-220: An Introduction to Global Awareness LE-300: Life Skills and Career Opportunities	
	12 <sup>th</sup>	<b>Core Academic Courses*:</b>	English Electives, U.S. Government, Economics (if not taken in 11th), Physical Education, Math Elective, Science Elective courses are recommended	<b>Suggested Electives:</b> AS-400: Management of the Cadet Corps AS-410: Survival: Survive-Return Drill & Ceremony Class
		<b>Career Path Courses:</b>	Fourth Year AS/LE-40X AS-300: Exploring Space: The High Frontier LE-400: Leadership Education: Principles of Management	

### Secondary to Postsecondary Linkages & Certifications

<b>Recognition for Advanced Learning</b>	<b>Postsecondary Credit Options:</b>
	<b>Industry Recognized Certificate(s) or License(s)</b> AFJROTC Certificate of Completion. Students who complete at least three years in any JROTC program and choose to enlist in the active duty military will receive two additional ranks in the Army, Navy and Air Force and one additional rank in the Marine Corps.

	Postsecondary Programs Available in Iowa		Iowa Institutions	Entrance Exams/ Requirements
Postsecondary Education Opportunities	Certificate	Iowa National Guard, active and reserve military	<a href="http://www.waterlooschools.org">www.waterlooschools.org</a>	High School Diploma and meet qualifications scores on the ASVAB
	Associate Degree	A student can attend a community college while also being a part of the ROTC program at the closest 4-year school. Hawkeye, Kirkwood, DMACC, and Iowa Western Community College are all considered cross-town schools.		High School Diploma/GED



	Bachelor Degree	ROTC at the college level. All three major state institutions and the University of Dubuque offer Army ROTC, Air Force ROTC is offered at Iowa and Iowa State, Navy/Marine Corps is offered at Iowa State. There are a number of cross-town schools like Drake and Coe College where you can attend and still be in ROTC. Contact the appropriate ROTC unit to see a complete listing of all cross-town schools.	<a href="http://www.uni.edu/csbs/military-science/">http://www.uni.edu/csbs/military-science/</a> <a href="http://www.uiowa.edu/~afrotc/">http://www.uiowa.edu/~afrotc/</a> <a href="http://www.uiowa.edu/armyrotc/">http://www.uiowa.edu/armyrotc/</a> <a href="http://www.armyrotc.iastate.edu/">http://www.armyrotc.iastate.edu/</a> <a href="http://www.navy.iastate.edu/">http://www.navy.iastate.edu/</a> <a href="https://www.airforce.iastate.edu/">https://www.airforce.iastate.edu/</a>	See each school's Admissions website.
	Graduate			

### Cluster Overview:

The Science, Technology, Engineering and Math Career Cluster prepares students in planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering).

### Extended Learning Experiences

#### Curricular Experiences:

**Aerospace Science coursework:** *Science:* Civilian and military contributions to aviation, astronomical and space exploration history, principles of flight, space science, space exploration, space technology, science of flight, weather, flight navigation, flight and the human body, robotics, human experiences in space, and commercial uses of space. *Global Awareness* includes cultural awareness, religions, languages, cultures, political systems, economies, social issues, environmental concerns, and human rights. All content complements other math, physics and other science based related courses and are aligned with National Science Education Standards, Math Standards and Expectations and the ISTE.

#### Extracurricular Experiences:

Drill Team – Competes in 3-4 drill meets /year  
 Marksmanship Team –8-10 competitions /year  
 Physical Fitness Team –3 meets per year  
 Academic Bowl - Competes in the JROTC Academic Bowl and one meet during the year  
 Summer Leadership Camp- Ft Dodge  
 Leadership Reaction Course- Ft Dodge  
 Multiple Field trips to museums/ MIL bases

#### Work-Based Learning Experiences:

**Leadership coursework:** Citizenship rights and responsibilities, individual self-control, communicating effectively, understanding group and team dynamics, solving conflicts and problems, health and wellness, fitness, learning and innovation (thinking) skills, critical thinking, problem solving, creativity and innovation, collaboration, media and technology skills -information literacy, media literacy, and ICT (information, communications, and technology) literacy, life and career skills, flexibility, adaptability, productivity, accountability, financial planning, and fundamentals of management including management techniques, management decisions, management functions and managing self and others. All leadership coursework is recognized as 21<sup>st</sup> Century Skills as defined by the Partnership for 21<sup>st</sup> Century Skills and is integrated into lesson objectives and samples of behavior.

#### Program Accreditation and/or Professional Association(s):

All materials aligned to following:

- National Science Education Standards
- Math Standards and Expectations
- National Council for the Social Studies
- National Geography Standards
- ISTE National Educational Technology
- Partnership for 21<sup>st</sup> Century Skills

Accreditation by:

- Commission on International and Trans-Regional Accreditation
- Southern Association of Colleges and Schools Council on Accreditation and School Improvement

#### Service Learning Experiences:


Citizenship responsibilities as well as in 4<sup>th</sup> year, cadets manage multiple facets of corps including planning, organizing, coordinating, directing, controlling, and decision making under supervision of instructors providing practice of communication, decision-making, personal interaction, managerial and organizational skills through multiple venues including over 1,300 hours of community service projects, drill meets and academic projects.

### Career Options:

### Salary Range:


Certificate	Military Enlisted. Qualified JROTC cadets can earn two additional ranks and start as an E-3. Must be a US citizen to reenlist for a second term. Fast track process during first enlistment.	\$\$
Bachelor Degree	Military Enlisted E-7 and above. An associate degree is highly recommended for advancement for E-7.	\$\$\$
Associate Degree	Military Officer. Students must also be in an ROTC program at college, or one of the military service academies (Air Force Academy etc..). Must be a US citizen to be an officer. Fast track process available following selection into an ROTC program. Citizenship is required for service academies.	\$\$\$\$
Graduate	Military Officer O-4 and above. Graduate degree is highly recommended for advancement to O-4.  * \$ = \$15-25,000; \$\$ = \$25-55,000; \$\$\$ = \$55-90,000; \$\$\$\$ = Above \$90,000	\$\$\$\$



 Government & Public Administration		Pathway: National Security			
		Plan of Study: Army JROTC			
Health and Human Services Academy					
Career Goal:					
Suggested High School Courses					
High School  Foreign Language (recommended by four-year colleges)	9 <sup>th</sup>	Core Academic Courses*:	English 9 or Adv. English 9, Algebra I or Geometry, Earth & Space Science, US History, Physical Education and C <sup>3</sup> Foundations	Suggested Electives: Foreign Language	
		Career Path Courses:	LET 1: Introduction to Leadership Education and Training		
	10 <sup>th</sup>	Core Academic Courses*:	English 10 or Adv. English 10, Algebra II or Geometry, Biology, World History or Adv. World History, Physical Education	Suggested Electives: Metal Working	
		Career Path Courses:	LET 2: Intermediate Leadership Education and Training		
	11 <sup>th</sup>	Core Academic Courses*:	Am Lit/Comp or Adv. Am Lit & Composition Course or AP Lang/Comp, Algebra II or Geometry or Math Elective, Physical Science or equivalent, Contemporary Affairs or Adv. Contemporary Affairs, Economics, Physical Education	Suggested Electives: Robotics	
		Career Path Courses:	LET 3: Applied Leadership and Training		
	12 <sup>th</sup>	Core Academic Courses*:	English Electives, U.S. Government, Economics (if not taken in 11th), Physical Education, Math Elective, Science Elective courses are recommended	Suggested Electives: Strength and Conditioning	
		Career Path Courses:	LET 4: Advanced Leadership Education and Training		
	Secondary to Postsecondary Linkages & Certifications				
	Recognition for Advanced Learning	Postsecondary Credit Options: Advanced rank to E-2 with three years of Army JROTC if person volunteers for military service			
Industry Recognized Certificate(s) or License(s)					
	Postsecondary Programs Available in Iowa		Iowa Institutions	Entrance Exams/ Requirements	
Postsecondary Education Opportunities	Certificate		<a href="http://www.waterlooschools.org">www.waterlooschools.org</a>	High School	
	Associate Degree	May take Army Senior ROTC while attending Hawkeye Community College	<a href="http://www.hawkeyecollege.edu">www.hawkeyecollege.edu</a>	High School Diploma/GED	

	Bachelor Degree	Army Senior ROTC Senior Army Instructor may nominate exceptional JROTC Cadets to United States Military Academy at West Point, NY.	<a href="http://www.uni.edu">www.uni.edu</a> <a href="http://www.uiowa.edu">www.uiowa.edu</a> <a href="http://www.iastate.edu">www.iastate.edu</a>	See each school's Admissions website.
	Graduate			See each school's Admissions website.
Cluster Overview:				
Extended Learning Experiences				
Curricular Experiences: Hands-on Leadership opportunity at Squad, Platoon, Company and Battalion level in Army JROTC		Co-curricular Experiences: Air Rifle Team Drill Team Color Guard Team Raider Team Attend JROTC Cadet Leadership camp in summer at Camp Dodge, IA		
Work-Based Learning Experiences: Extra curricular experience with Veterans & veteran organizations		Program Accreditation and/or Professional Association(s):		
Service Learning Experiences: Learn U.S. flag etiquette in classroom. Collect old, unserviceable U.S. flags within community for proper disposal. Dispose of unserviceable U.S. flags in formal Flag Retirement Ceremonies. Reflect on service to community and honor due to U.S. flag, especially within local Veteran community.				
Career Options:				Salary Range:
Certificate	Enlist in USA, USN, USMC, USAF or USCG			\$ - \$\$
Associate Degree	Enlist with more rank in USA, USN, USMC, USAF, or USCG			\$-\$\$\$
Bachelor Degree	Commission as military officer after completing Senior ROTC			\$\$-\$\$\$
Graduate	Commission as military officer with certain profession degrees (e.g. medical and legal)			\$\$\$-\$\$\$

\* \$ = \$15-25,000; \$\$ = \$25-55,000; \$\$\$ = \$55-90,000; \$\$\$\$ = Above \$90,000

		<b>Pathway: Hospitality and Tourism</b>			
		<b>Plan of Study: Culinary Arts</b>			
Health and Human Services Academy					
<b>Career Goal:</b> The management, marketing and operations of restaurants and other food services, lodging, attractions, recreation events and travel related services.					
Suggested High School Courses					
High School  Foreign Language (recommended by four-year colleges)	9 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 9 or Adv. English 9, Algebra I or Geometry, Earth & Space Science, US History, Physical Education and C <sup>3</sup> Foundations	<b>Suggested Electives:</b>  Consumer Services Pathway Personal Finance Intro to Entrepreneurship	
		<b>Career Path Courses:</b>	FCS120 Exploring Careers in Human Services		
	10 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 10 or Adv. English 10, Algebra II or Geometry, Biology, World History or Adv. World History, Physical Education	<b>Suggested Electives:</b>  Consumer Services Pathway Personal Finance Intro to Entrepreneurship	
		<b>Career Path Courses:</b>	FCS215 ProStart Culinary Arts I (Double block, 1 semester)		
	11 <sup>th</sup>	<b>Core Academic Courses*:</b>	Am Lit/Comp or Adv. Am Lit & Composition Course or AP Lang/Comp, Algebra II or Geometry or Math Elective, Physical Science or equivalent, Contemporary Affairs or Adv. Contemporary Affairs, Economics, Physical Education	<b>Suggested Electives:</b>  Consumer Services Pathway Personal Finance Intro to Entrepreneurship	
		<b>Career Path Courses:</b>	FCS315 ProStart Culinary Arts II (Double block, 1 semester)		
	12 <sup>th</sup>	<b>Core Academic Courses*:</b>	English Electives, U.S. Government, Economics (if not taken in 11th), Physical Education, Math Elective, Science Elective courses are recommended	<b>Suggested Electives:</b>  Consumer Services Pathway Personal Finance Intro to Entrepreneurship	
		<b>Career Path Courses:</b>	FCS400 Intro to Hospitality (HCM608) and FCS401 Intro to Restaurant Management		
	Secondary to Postsecondary Linkages & Certifications				
	Recognition for Advanced Learning	<b>Postsecondary Credit Options:</b> DMACC and Hawkeye Community College			
<b>Industry Recognized Certificate(s) or License(s)</b> Servesafe, Pro Start National Certification					
	Postsecondary Programs Available in Iowa		Iowa Institutions	Entrance Exams/Requirements	
Postsecondary Education Opportunities	Certificate	Culinary Arts, Advanced Culinary Arts, Food Service	<a href="http://www.waterlooschools.org">www.waterlooschools.org</a> and the Iowa Community College System	High School Diploma	
	Associate Degree	Culinary Arts, Advanced Culinary Arts, Food Service	<a href="http://www.dmac.edu">www.dmac.edu</a> <a href="http://www.kirkwood.edu">www.kirkwood.edu</a>	High School Diploma/GED	

	Bachelor Degree	Culinary Arts, Advanced Culinary Arts, Restaurant and Resort Management, Business	<a href="http://www.uni.edu">www.uni.edu</a>	See each school's Admissions website.
	Graduate			See each school's Admissions website.

### Cluster Overview:

Lodging Pathway: Employees working in the Restaurant and Food/Beverage Services pathway perform a variety of tasks to maintain operations and promote guest services in eating and drinking establishments, including laboratory and testing services, and research and development services.

### Extended Learning Experiences


<b>Curricular Experiences:</b> Future Business Leaders of America Knowledge Bowl	<b>Extracurricular Experiences:</b> Language Tutor School Newspaper Yearbook School Class Officer
<b>Work-Based Learning Experiences:</b> Career Preparation-Paid and Unpaid, Job Shadowing, Internships	<b>Program Accreditation and/or Professional Association(s):</b> American Management Association, American Society of Association Executives, Institute of Certified Professional Managers, National Management Association, Future Business Leaders-Phi Beta Lambda
<b>Service Learning Experiences:</b> Community Service Volunteer	

### Career Options:

### Salary Range:

Certificate	Banquet Server Banquet Set-Up Employee Bus Person, Counter Server, Host, Kitchen Steward Line Cook, Restaurant Server, Room Service Attendant	\$ - \$\$
Associate Degree	Baker Pastry and Specialty Chefs, Restaurant Server	\$ - \$\$\$
Bachelor Degree	Caterer Catering and Banquets Manager Executive Chef, Food and Beverage Manager, General Manager, Kitchen Manager, Maître d' Restaurant Owner, Services Manager	\$\$\$
Graduate	Executive Director, Assistant Director, Director of Tourism Development, Director of Membership Development, Director of Communications, Director of Visitor Services, Director of Sales, Director of Marketing and Advertising, Director of Volunteer Services, Director of Convention and Visitors Bureau, Market Development Manager	\$\$\$ - \$\$\$\$

\* \$ = \$15-25,000; \$\$ = \$25-55,000; \$\$\$ = \$55-90,000; \$\$\$\$ = Above \$90,000

		<b>Pathway: Human Services</b>		
		<b>Plan of Study: Early Childhood Education</b>		
<i>Health and Human Services Academy</i>				
<b>Career Goal:</b> The Early Childhood Education program prepares students to teach in current and future classrooms that include children in regular education, those in special education, and those who speak English as a second language. Possible careers include child care center director, prekindergarten teacher, elementary teacher (K-3rd grade), infant and toddler teacher, or special education teacher for young children with mild to moderate disabilities.				
Suggested High School Courses				
High School	9 <sup>th</sup>	Core Academic Courses*:	English 9 or Adv. English 9, Algebra I or Geometry, Earth & Space Science, US History, Physical Education and C <sup>3</sup> Foundations	Suggested Electives:  Consumer Services Pathway Personal Finance Intro to Entrepreneurship
		Career Path Courses:	FCS120 Exploring Careers in Human Services FCS229 Child Development	
	10 <sup>th</sup>	Core Academic Courses*:	English 10 or Adv. English 10, Algebra II or Geometry, Biology, World History or Adv. World History, Physical Education	Suggested Electives:  Consumer Services Pathway Personal Finance Intro to Entrepreneurship
		Career Path Courses:	FCS222 Exploring Early Childhood (Double blocked, 1 semester course)	
	11 <sup>th</sup>	Core Academic Courses*:	Am Lit/Comp A/B or Adv. Am Lit & Composition Course or AP Lang/Comp, Algebra II or Geometry or Math Elective, Physical Science or equivalent, Contemporary Affairs or Adv. Contemporary Affairs, Economics, Physical Education	Suggested Electives:  Exploring PK-12 Education
		Career Path Courses:	CAR330 Multicultural Practices in the Classroom, FCS421 Early Childhood Guidance(ECE243)	
	12 <sup>th</sup>	Core Academic Courses*:	English Electives, U.S. Government, Economics (if not taken in 11th), Physical Education, Math Elective, Science Elective courses are recommended	Suggested Electives:  Personal Finance Intro to Entrepreneurship
		Career Path Courses:	FCS419 Child Health, Safety, and Nutrition((ECE133), ENG310 Children’s Literature	
Secondary to Postsecondary Linkages & Certifications				
Recognition for Advanced Learning	Postsecondary Credit Options: ECE103 Intro to Early Childhood, ECE170 Child Growth and Development, ECE158 Early Childhood, ECE133 Child Health, Safety and Nutrition Curriculum I			
	Industry Recognized Certificate(s) or License(s) National Council for Professional Recognition (CDA) Child Development Associate (CDA)			
	Postsecondary Programs Available in Iowa		Iowa Institutions	Entrance Exams/ Requirements
Postsecondary Education	Certificate	Child Development Associate Certificate, Child Care Worker, Educational Aide, Nanny, Teacher, Preschool Teacher, Lead Teacher, Early Childhood Teacher, Headstart, Child Care Worker, Child Caregiver, Before and After School Worker, Child Care Provider, Child Care Assistant, Child Care Aide, Playground Aide, Preschool Aide Teacher, Toddler Teacher, Child Care Director	<a href="http://www.waterlooschools.org">www.waterlooschools.org</a> and the Iowa Community College System	High School Diploma
	Associate	Childhood Development Associate Degree (AA), Preschool Teacher, After-School Program Supervisor, Teaching Assistant, Child Care Worker, Para-Educator	<a href="http://www.hawkeyecollege.edu">www.hawkeyecollege.edu</a>	High School Diploma/GED

	<b>Bachelor Degree</b>	Early Childhood Education (BA), Early Childhood Special Education Human Development & Family Studies Elementary Education with licensure for 0-grade 3 Early Childhood Education (0-grade 3)	<a href="http://www.uni.edu">www.uni.edu</a>	See each school's Admissions website.
	<b>Graduate</b>	Early Childhood Education, MA & PhD Special Education, MA & PhD	<a href="http://www.uni.edu">www.uni.edu</a>	See each school's Admissions website.

### Cluster Overview:

People with careers in early childhood development and services nurture and teach children. They provide services in childcare centers, nursery schools, preschools, public schools, private households, family childcare homes, and before- and after-school programs.

### Extended Learning Experiences

<b>Curricular Experiences:</b> Examples: Family, Career and Community Leaders of America	<b>Extracurricular Experiences:</b>
<b>Work-Based Learning Experiences:</b> Preschool/child care lab experience Work Study	<b>Program Accreditation and/or Professional Association(s):</b> National Association for the Education of Young Children; Association for Childhood Education International; National Child Care Association; The National Association for Child Care Resource and Referral Agencies; National Head Start Association; National Institute for Early Education Research; National Association of Early Childhood Teacher Educators Practical Learning
<b>Service Learning Experiences:</b>	

Career Options:		Salary Range:
<b>Certificate</b>	Child Care Worker, Educational Aide, Nanny, Teacher, Preschool Teacher, Lead Teacher, Early Childhood Teacher, Headstart, Before and After School Worker, Child Care Provider, Child Care Assistant, Child Care Aide, Playground Aide, Preschool Aide Teacher, Toddler Teacher, Child Care Director	\$ - \$\$
<b>Associate Degree</b>	Preschool Teacher, After-School Program Supervisor, Teaching Assistant, Child Care Worker, Para-Educator	\$ - \$\$\$
<b>Bachelor Degree</b>	Preschool & Child Care Program Administrator, Child Care Supervisor, Elementary Teacher, Early Interventionist, Preschool/Kindergarten Teacher	\$\$-\$\$\$
<b>Graduate</b>	Special Education Teacher, Preschool, Child Care Director/Owner, Education Administrator, Early Interventionist, University Instructor or Professor	\$\$\$ - \$\$\$\$

\* \$ = \$15-25,000; \$\$ = \$25-55,000; \$\$\$ = \$55-90,000; \$\$\$\$ = Above \$90,000



## Pathway: Office & Information Technology

### Plan of Study: Information Technology

Arts, Communication & Business Academy

**Career Goal:** Building linkages in IT occupations for entry level, technical and professional careers related to the design, development, support and management of hardware, software, multimedia and systems integration services.

#### Suggested High School Courses

High School Foreign Language (recommended by four-year colleges)	9 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 9 or Adv. English 9, Algebra I or Geometry, Earth & Space Science, US History, Physical Education and C <sup>3</sup> Foundations	<b>Suggested Electives:</b> Fundamentals of Oral Communication (HCC) Business Pathway Arts , A/V Technology and Communication Pathway
		<b>Career Path Courses:</b>	COM110 Computer Applications I COM204 Computer Applications II	
	10 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 10 or Adv. English 10, Algebra II or Geometry, Biology, World History or Adv. World History, Physical Education	<b>Suggested Electives:</b> Fundamentals of Oral Communication (HCC) Business Pathway Arts , A/V Technology and Communication Pathway
		<b>Career Path Courses:</b>	COM218 Database and Spreadsheets (BCA205), COM225 Intro to Data Base CIS303, COM203 Intro to Web Design (GRA150)	
	11 <sup>th</sup>	<b>Core Academic Courses*:</b>	Am Lit/Comp or Adv. Am Lit & Composition Course or AP Lang/Comp, Algebra II or Geometry or Math Elective, Physical Science or equivalent, Contemporary Affairs or Adv. Contemporary Affairs, Economics, Physical Education	<b>Suggested Electives:</b> Fundamentals of Oral Communication (HCC) Business Pathway Arts , A/V Technology and Communication Pathway
		<b>Career Path Courses:</b>	CAR310 A+ Certification Prep (NET109 )	
	12 <sup>th</sup>	<b>Core Academic Courses*:</b>	English Electives, U.S. Government, Economics (if not taken in 11th), Physical Education, Math Elective, Science Elective courses are recommended	<b>Suggested Electives:</b> Fundamentals of Oral Communication (HCC) Business Pathway Arts , A/V Technology and Communication Pathway
		<b>Career Path Courses:</b>	Information Technology Internship, CCNA Networking (net +) or CAR464 CISCO Networking (NET213)	

#### Secondary to Postsecondary Linkages & Certifications

Recognition for Advanced Learning	<b>Postsecondary Credit Options:</b> Listed above
	<b>Industry Recognized Certificate(s) or License(s)</b> With the successful completion of the program, a student can earn an Introduction to Information Technology Certificate or Introduction to Business Certificate from Hawkeye Community College. Additionally, students can earn an Industry Based Certification from CompTia in A+ and Net + upon successful completion of certification exam. Also students can earn the National Career Readiness Certificate (NCRC) through Iowa Work Force Development.

Postsecondary Programs Available in Iowa			Iowa Institutions	Entrance Exams/ Requirements
Postsecondary Education Opportunities	Certificate	A+, Net +, Introduction to Information Technology Certificate, Introduction to Business Certificate (HCC), Office Computer Specialist/Assistant	<a href="http://www.waterlooschools.org">www.waterlooschools.org</a> and the Iowa Community College System	High School Diploma
	Associate Degree	Computer Information Systems Computer Science, Computer Support Professional, Computer Technologies, Information Technology, Graphic Designer, Web Developer, Video Editor	<a href="http://www.hawkeyecollege.edu">www.hawkeyecollege.edu</a>	High School Diploma/GED

	Bachelor Degree	Computer Science	<a href="http://www.uni.edu">www.uni.edu</a>	See each school's Admissions website.
	Graduate	Computer Science, MS & PhD	<a href="http://www.uni.edu">www.uni.edu</a> <a href="http://www.iastatae.edu">www.iastatae.edu</a>	See each school's Admissions website.

**Cluster Overview:** Careers in Network Systems involve network analysis, planning and implementation, including design, installation, maintenance and management of network systems. People with expertise in Network Systems are in high demand for a variety of positions, doing work such as creating and maintaining the infrastructure.

Careers in Management and Administration Career Cluster prepares students for careers that encompass planning, organizing, directing and evaluating business functions essential to efficient and productive operations.


#### Extended Learning Experiences

<b>Curricular Experiences:</b> Yearbook Newspaper Business Professionals of America SkillsUSA School Class Officer	<b>Extracurricular Experiences:</b> Business Professionals of America SkillsUSA School Class Officer
<b>Work-Based Learning Experiences:</b> Career Internship – paid positions around the community Internships Job Shadowing	<b>Program Accreditation and/or Professional Association(s):</b> CompTia Iowa Work Force Development Business Professionals of America SkillsUSA
<b>Service Learning Experiences:</b> Boys and Girls Clubs of America, Boy Scouts of America, Community Service Volunteer, Girl Scouts of the USA	

Career Options:		Salary Range:
Certificate	Network Administrator Assistant Office Clerk	\$ - \$\$
Associate Degree	Computer Information Systems Computer Science, Computer Support Professional, Computer Technologies, Information Technology, Graphic Designer, Web Developer, Video Editor, Office Assistant, Office Manager	\$\$
Bachelor Degree	Computer Science Network Administrator Office Manager	\$\$-\$\$\$
Graduate	Computer Science, MS & PhD	\$\$\$ - \$\$\$\$

\* \$ = \$15-25,000; \$\$ = \$25-55,000; \$\$\$ = \$55-90,000; \$\$\$\$ = Above \$90,000



		<b>Pathway: Manufacturing Production Process Development</b>		
		<b>Plan of Study: Advanced Manufacturing</b> <i>Engineering, Technology &amp; Manufacturing Academy</i>		
<b>Career Goal:</b> Advanced Manufacturing Pathway: Employees in Advanced Manufacturing are responsible for product design and design of the manufacturing process. They work with customers to ensure the manufacturing process produces a product that meets or exceeds customer expectations. They also monitor the manufacturing process and the materials used to manufacture the product.				
Suggested High School Courses				
High School  Foreign Language (recommended by four-year colleges)	9 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 9 or Adv. English 9, Algebra I or Geometry, Earth & Space Science, US History, Physical Education and C <sup>3</sup> Foundations	<b>Suggested Electives:</b>  Architectural Drafting Mechanical Drafting STEM Pathway Construction Pathway
		<b>Career Path Courses:</b>	IND100 Introduction to Technology, IND105 Intro to Metals in Manufacturing	
	10 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 10 or Adv. English 10, Algebra II or Geometry, Biology, World History or Adv. World History, Physical Education	<b>Suggested Electives:</b>  Architectural Drafting Mechanical Drafting STEM Pathway Construction Pathway
		<b>Career Path Courses:</b>	IND347 Molten Metal Technology, IND346 Basic Design & Modeling IND314 Machine Trade Printreading I (MFG122)	
	11 <sup>th</sup>	<b>Core Academic Courses*:</b>	Am Lit/Comp or Adv. Am Lit & Composition Course or AP Lang/Comp, Algebra II or Geometry or Math Elective, Physical Science or equivalent, Contemporary Affairs or Adv. Contemporary Affairs, Economics, Physical Education	<b>Suggested Electives:</b>  Architectural Drafting Mechanical Drafting STEM Pathway Construction Pathway
		<b>Career Path Courses:</b>	IND348 CNC Fundamentals (MFG302)/IND349 Basic Machine Theory (MFG211)	
	12 <sup>th</sup>	<b>Core Academic Courses*:</b>	English Electives, U.S. Government, Economics (if not taken in 11th), Physical Education, Math Elective, Science Elective courses are recommended	<b>Suggested Electives:</b>  Architectural Drafting Mechanical Drafting STEM Pathway Construction Pathway
		<b>Career Path Courses:</b>	Manufacturing Internship	
Secondary to Postsecondary Linkages & Certifications				
Recognition for Advanced Learning	<b>Postsecondary Credit Options:</b> MFG142 Geometric Dimensioning and Tolerancing, MFG142 Advance Machine Theory, MFG228 Machine Operations II, MFG306 CNC Operations II, MFG309 CNC Programming Theory II			
	<b>Industry Recognized Certificate(s) or License(s)</b> With the successful completion of the program, a student can earn a Master Cam Certificate and a certificate from Hawkeye Community College in Machine Technology. Waterloo Schools will award a certificate of completion for CADD I.			
	Postsecondary Programs Available in Iowa		Iowa Institutions	Entrance Exams/Requirements
	Certificate	Machining Technology, Industrial Mechanics, Industrial Technologies, Manufacturing Technology, Master CAM Certification	<a href="http://www.waterlooschools.org">www.waterlooschools.org</a> and the Iowa Community College System	High School Diploma
	Associate Degree	CNC Technology Certificate, National Institute for Metalworking Skills, NIMS Certificate.	<a href="http://www.hawkeyecollege.edu">www.hawkeyecollege.edu</a>	High School Diploma/GED

	Bachelor Degree	Civil, Electrical, Environmental & Mechanical Engineering, Industrial Engineering, Mechanical Engineering	<a href="http://www.uni.edu">www.uni.edu</a>	See each school's Admissions website.
	Graduate	Engineering Management, MS; Industrial & Systems Engineering, MS; Mechanical Engineering, MS & PhD	<a href="http://www.uni.edu">www.uni.edu</a> <a href="http://www.uiowa.edu">www.uiowa.edu</a> <a href="http://www.iastate.edu">www.iastate.edu</a>	See each school's Admissions website.

### Cluster Overview:

Employees in Manufacturing Production Process Development are responsible for product design and design of the manufacturing process. They work with customers to ensure the manufacturing process produces a product that meets or exceeds customer expectations. They also monitor the manufacturing process and the materials used to manufacture the product.

### Extended Learning Experiences

#### Curricular Experiences:

Examples:  
SkillsUSA

#### Extracurricular Experiences:

Examples:  
Odyssey of the Mind

#### Work-Based Learning Experiences:

Career Preparation-Paid and Unpaid, Job Shadowing, Internships

#### Program Accreditation and/or Professional Association(s):

Examples:  
American Iron & Steel Institute  
American Machine Tool Distributors Association  
American Society for Nondestructive Testing  
American Society for Testing and Materials  
American Welding Society  
Composites Fabricators Association  
National Association of Manufacturers  
National Tooling & Machining Association  
Precision Metal Forming Association

#### Service Learning Experiences:


Boy Scouts of America, Girl Scouts of the USA, Habitat for Humanity, Community Service Volunteer

### Career Options:

### Salary Range:

Certificate	CNC Set-up specialist, CADD Operator, CNC Operator	\$ - \$\$
Associate Degree	CNC Set-up specialist, CADD Operator, CNC Operator, CNC Programmer, Electrical Discharge Machines	\$-\$\$\$
Bachelor Degree	Calibration Technician Electromechanical Technician Industrial Engineer	\$\$\$
Graduate	Production Managers Industrial and Manufacturing Engineers	\$\$\$ - \$\$\$\$

\* \$ = \$15-25,000; \$\$ = \$25-55,000; \$\$\$ = \$55-90,000; \$\$\$\$ = Above \$90,000

		<b>Pathway: Marketing Management</b>		
		<b>Plan of Study: Marketing Management</b> <i>Arts, Communication &amp; Business Academy</i>		
<b>Career Goal:</b> Merchandising: Employees in buying and merchandising positions get the product into the hands of the customer. This process includes forecasting, planning, buying, displaying, selling and providing customer service. This Career Pathway Plan of Study (based on the Management and Entrepreneurship Pathway of the Marketing, Sales and Service Career Cluster) can serve as a guide, along with other career planning materials, as learners continue on a career path.				
Suggested High School Courses				
High School  Foreign Language (recommended by four-year colleges)	9 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 9 or Adv. English 9, Algebra I or Geometry, Earth & Space Science, US History, Physical Education and C <sup>3</sup> Foundations	<b>Suggested Electives:</b> Fundamentals of Oral Communication (HCC) Business Pathway Arts , A/V Technology and Communication Pathway
		<b>Career Path Courses:</b>	COM101 Intro to Computers I, COM110 Computer Applications I, COM204 Computer Applications II	
	10 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 10 or Adv. English 10, Algebra II or Geometry, Biology, World History or Adv. World History, Physical Education	<b>Suggested Electives:</b> Fundamentals of Oral Communication (HCC) Business Pathway Arts , A/V Technology and Communication Pathway
		<b>Career Path Courses:</b>	COM211 Internet Applications, COM203 Introduction to Web Design (GRA150)	
	11 <sup>th</sup>	<b>Core Academic Courses*:</b>	Am Lit/Comp or Adv. Am Lit & Composition Course or AP Lang/Comp, Algebra II or Geometry or Math Elective, Physical Science or equivalent, Contemporary Affairs or Adv. Contemporary Affairs, Economics, Physical Education	<b>Suggested Electives:</b> Fundamentals of Oral Communication (HCC) Business Pathway Arts , A/V Technology and Communication Pathway
		<b>Career Path Courses:</b>	BUS310 Introduction to Business (BUS102), BUS326 Exploring Business and Marketing Careers	
	12 <sup>th</sup>	<b>Core Academic Courses*:</b>	English Electives, U.S. Government, Economics (if not taken in 11th), Physical Education, Math Elective, Science Elective courses are recommended	<b>Suggested Electives:</b> Fundamentals of Oral Communication (HCC) Business Pathway Arts , A/V Technology and Communication Pathway
		<b>Career Path Courses:</b>	Marketing Internship	
Secondary to Postsecondary Linkages & Certifications				
Recognition for Advanced Learning	<b>Postsecondary Credit Options:</b> Listed above. Hawkeye Community College			
	<b>Industry Recognized Certificate(s) or License(s)</b> With the successful completion of the program, a student can earn a Microsoft Officer Certificate in Word, Excel, Powerpoint, and Access as well as the National Career Readiness Certificate through Iowa Work Force Development.			
	Postsecondary Programs Available in Iowa		Iowa Institutions	Entrance Exams/ Requirements
Postsecondary Education Opportunities	Certificate	Microsoft Office Certificates in Word, Excel, PowerPoint, and Access. National Career Readiness Certificate through Iowa Work Force Development	<a href="http://www.waterlooschools.org">www.waterlooschools.org</a> and the Iowa Community College System	High School Diploma

	Associate Degree	Management Information Systems Business Administration Marketing/Management Sales Accounting	<a href="http://www.hawkeyecollege.edu">www.hawkeyecollege.edu</a>	High School Diploma/GED
	Bachelor Degree	Management Information Systems Business Administration Marketing Sales Management Accounting, Human Resource Management Communications, Public Relations	<a href="http://www.uni.edu">www.uni.edu</a>	See each school's Admissions website.
	Graduate	Master in Business Administration Instructional Technology	<a href="http://www.uni.edu">www.uni.edu</a> <a href="http://www.uiowa.edu">www.uiowa.edu</a> <a href="http://www.iastate.edu">www.iastate.edu</a>	See each school's Admissions website.

**Cluster Overview:** Students will develop a foundational knowledge of marketing and its functions including channel management, marketing information management, pricing, product/service management, promotion, and selling. Students will understand the interrelationships and contributions to business success. Students will understand the need for marketing strategies and market identification. Students will practice customer relationship skills, ethics, technology applications, and working in the regulatory environment.

#### Extended Learning Experiences


<b>Curricular Experiences:</b> Business Professionals of America SkillsUSA School Class Officer	<b>Extracurricular Experiences:</b> Business Professionals of America SkillsUSA School Class Officer
<b>Work-Based Learning Experiences:</b> Career Internship-paid positions around the community Internships Job Shadowing	<b>Program Accreditation and/or Professional Association(s):</b> Iowa Work Force Development Business Professionals of America SkillsUSA
<b>Service Learning Experiences:</b> Boys and Girls Clubs of America, Boy Scouts of America, Community Service Volunteer, Girl Scouts of the USA	

#### Career Options:

#### Salary Range:

Certificate	Office Assistant Data Entry Clerk Customer Service Representative	\$ - \$\$
Associate Degree	Executive Assistant Business Administration Marketing Assistant Sales, Bookkeeper	\$-\$\$\$
Bachelor Degree	Management Information Systems Business Administration Marketing Sales Management Accounting, Director of Human Resource Management Communication, Public Relations	\$\$\$
Graduate	Masters in Business Administration Instructional Technology Chief Executive Officer, Chief Financial Officer	\$\$\$-\$\$\$

\* \$ = \$15-25,000; \$\$ = \$25-55,000; \$\$\$ = \$55-90,000; \$\$\$\$ = Above \$90,000

			<b>Pathway: STEM Engineering, Industrial &amp; Technology Services</b>		
			<b>Plan of Study: Project Lead the Way</b>		
			Engineering, Technology & Manufacturing Academy		
<b>Career Goal:</b> Planning, managing and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.					
Suggested High School Courses					
High School  Foreign Language (recommended by four-year colleges)	9 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 9 or Adv. English 9, Algebra I or Geometry, Earth & Space Science, US History, Physical Education and C <sup>3</sup> Foundations	<b>Suggested Electives:</b>  Architectural Drafting Mechanical Drafting Manufacturing Pathway Construction Pathway	
		<b>Career Path Courses:</b>	IND101 Mechanical Drafting and CAR450/451 Introduction to Engineering Design (EGT400)		
	10 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 10 or Adv. English 10, Algebra II or Geometry, Biology, World History or Adv. World History, Physical Education	<b>Suggested Electives:</b>  Architectural Drafting Mechanical Drafting Manufacturing Pathway Construction Pathway	
		<b>Career Path Courses:</b>	IND102 Architectural Drafting and CAR460/461 Principles of Engineering (EGT410)		
	11 <sup>th</sup>	<b>Core Academic Courses*:</b>	Am Lit/Comp or Adv. Am Lit & Composition Course or AP Lang/Comp, Algebra II or Geometry or Math Elective, Physical Science or equivalent, Contemporary Affairs or Adv. Contemporary Affairs, Economics, Physical Education (1)	<b>Suggested Electives:</b>  Architectural Drafting Mechanical Drafting Manufacturing Pathway Construction Pathway	
		<b>Career Path Courses:</b>	CAR324/325 Digital Electronics (EGT420)		
	12 <sup>th</sup>	<b>Core Academic Courses*:</b>	English Electives, U.S. Government, Economics (if not taken in 11th), Physical Education, Math Elective, Science Elective courses are recommended	<b>Suggested Electives:</b>  Architectural Drafting Mechanical Drafting Manufacturing Pathway Construction Pathway	
		<b>Career Path Courses:</b>	CAR484 Engineering Design and Development (EGT470) and Internship		
	Secondary to Postsecondary Linkages & Certifications				
	Recognition for Advanced Learning	<b>Postsecondary Credit Options:</b>			
<b>Industry Recognized Certificate(s) or License(s)</b> Many states require engineers to be licensed. Voluntary certification is available from the American Society of Mechanical Engineers (ASME).					
	Postsecondary Programs Available in Iowa		Iowa Institutions	Entrance Exams/ Requirements	
Postsecondary Education Opportunities	Certificate	Engineering Graphics Technology, Engineering Technology, Computer Aided Drafting & Design (CAD)	<a href="http://www.waterlooschools.org">www.waterlooschools.org</a> and the Iowa Community College System	High School Diploma	
	Associate Degree	Engineering Graphics Technology, Engineering Technology, Computer Aided Drafting & Design (CAD)	<a href="http://www.hawkeyecollege.edu">www.hawkeyecollege.edu</a>	High School Diploma/GED	

	Bachelor Degree	Bioengineering and Life Sciences, Metallurgy and Materials, Engineering Physics, Biomedical Engineering, Civil Engineering, Mechanical Engineering, Environmental Engineering, Space Engineering, Industrial Engineering, Engineering/Mechatronics, Engineering Management, Aerospace Engineering	<a href="http://www.uni.edu">www.uni.edu</a>	See each school's Admissions website.
	Graduate	MS Materials Science; MS Mechanical Engineering; MS Physics (Applied); MS Bioengineering; MS Mechanical Engineering; MS Biomedical Engineering; MS Industrial & Systems Engineering; MS & PhD Aerospace Engineering; MS & PhD Civil, Environmental & Architectural Engineering; PhD Mechanical Engineering	<a href="http://www.uiowa.edu">www.uiowa.edu</a> <a href="http://www.iastate.edu">www.iastate.edu</a>	See each school's Admissions website.

**Cluster Overview:** Engineering and Technology cluster students should study and apply principles from advanced mathematics, life sciences, physical science, earth and space science, and technology. In addition, future engineers and technologists should learn certain processes in mathematics, science and technology. In Grades 9-12, all future engineers and technologists should study mathematics each year, learning important mathematical concepts and processes defined by the National Council of Teachers of Mathematics in Principles and Standards for School Mathematics. With such knowledge and skills, students will be able to demonstrate the following competencies: 1.) Apply mathematics, science and technology concepts to solve problems quantitatively in engineering projects involving design, development or production in various technologies; and 2.) Recognize the core concepts of technology and their relationships with engineering, science and math, and other subjects. All future engineers and technologists should learn important science concepts and processes with an understanding of physics, chemistry and biology as a minimal set. These concepts and processes are defined by the National Research Council in the National Science Education Standards and by the American Association for the Advancement of Science in Benchmarks for Science Literacy. Additionally, learners should become proficient in the areas of technology defined by the Standards for Technological Literacy, including laboratory and testing services, and research and development services.

#### Extended Learning Experiences

<b>Curricular Experiences:</b> Examples: Technology Student Association National Technical Honor Society	<b>Extracurricular Experiences:</b> Examples: International Bridge Building Contest Junior Engineering Technical Society National Engineering Design Competition National Engineers Week Robotics Club Forensics
<b>Work-Based Learning Experiences:</b> Career Preparation – Paid and Unpaid, Job Shadowing, Internships	<b>Program Accreditation and/or Professional Association(s):</b> Examples: American Chemical Society, American Institute of Aeronautics and Astronautics, American Institute of Chemical Engineering, American Society of Civil Engineers, American Society of Mechanical Engineers, Institute of Electrical and Electronic Engineers, Mathematical Association of America, National Society of Black Engineers, Society of Automotive Engineers, Society of Hispanic Professional Engineers, Society of Women Engineers
<b>Service Learning Experiences:</b> Boy Scouts of America, Girl Scouts of the USA, Habitat for Humanity, Community Service Volunteer	

Career Options:		Salary Range:
Certificate	Mechanical Drafters (CAD)	\$ - \$\$
Bachelor Degree	Mechanical Engineering Technician, Project Manager	\$-\$\$\$
Associate Degree	Engineering Technologist, Environmental Engineer, Biomedical Engineer, Aerospace Engineer, Mechanical Engineer	\$\$\$
Graduate	Corporate Engineering, Engineering Technology Analyst	\$\$\$-\$\$\$

\* \$ = \$15-25,000; \$\$ = \$25-55,000; \$\$\$ = \$55-90,000; \$\$\$\$ = Above \$90,000

		<b>Pathway: Transportation, Distribution and Logistics</b>			
		<b>Plan of Study: Automotive-Maintenance Light Repair</b>			
<i>Engineering, Technology &amp; Manufacturing Academy</i>					
<b>Career Goal:</b> : Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.					
Suggested High School Courses					
High School  Foreign Language (recommended by four-year colleges)	9 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 9 or Adv. English 9, Algebra I or Geometry, Earth & Space Science, US History, Physical Education and C <sup>3</sup> Foundations	<b>Suggested Electives:</b>  Architectural Drafting Mechanical Drafting STEM Pathway Manufacturing Pathway	
		<b>Career Path Courses:</b>	IND100 Introduction to Technology		
	10 <sup>th</sup>	<b>Core Academic Courses*:</b>	English 10 or Adv. English 10, Algebra II or Geometry, Biology, World History or Adv. World History, Physical Education	<b>Suggested Electives:</b>  Architectural Drafting Mechanical Drafting STEM Pathway Manufacturing Pathway	
		<b>Career Path Courses:</b>	Automotive I Series (Double block, yearlong): IND330, IND333, IND319, IND329		
	11 <sup>th</sup>	<b>Core Academic Courses*:</b>	Am Lit/Comp A/B or Adv. Am Lit & Composition Course or AP Lang/Comp A/B, Algebra II or Geometry or Math Elective, Physical Science or equivalent, Contemporary Affairs, Adv. Contemporary Affairs, Economics, Physical Education	<b>Suggested Electives:</b>  Architectural Drafting Mechanical Drafting STEM Pathway Manufacturing Pathway	
		<b>Career Path Courses:</b>	Automotive II Series (Double block, yearlong): IND335, IND337, IND339		
	12 <sup>th</sup>	<b>Core Academic Courses*:</b>	English Electives, U.S. Government, Economics (if not taken in 11th), Physical Education, Math Elective, Science Elective courses are recommended	<b>Suggested Electives:</b>  Architectural Drafting Mechanical Drafting STEM Pathway Manufacturing Pathway	
		<b>Career Path Courses:</b>	Automotive III Series: IND341 and Internship		
	Secondary to Postsecondary Linkages & Certifications				
	Recognition for Advanced Learning	<b>Postsecondary Credit Options:</b> AUT107 Introduction to Automotive Technology, AUT405 Automotive Steering and Suspension, AUT505 Automotive Brakes, AUT165 Automotive Engine Repair			
<b>Industry Recognized Certificate(s) or License(s)</b> With the successful completion of the program, a student can earn a Maintenance and Light Repair Certificate from Hawkeye Community College.					
		Postsecondary Programs Available in Iowa		Iowa Institutions	Entrance Exams/ Requirements
Postsecondary Education Opportunities	Certificate	Automotive Service Technology, Auto Drive Lines/Suspension/ Brakes, Auto Electrical/Air Conditioning , Auto Engine Repair/ Performance Technician, Auto Heating/AC Technician, Automotive Drive Train Specialist, Automotive Engine Repair, Automotive Heating/Air Conditioning		<a href="http://www.waterlooschools.org">www.waterlooschools.org</a> and the Iowa Community College System	High School Diploma
	Associate Degree	Automotive Industrial Education , Automotive Mechanics, Automotive Mechanics Technology/Electronics /Computerized Diagnostics, Automotive Mechanics Technology/General, Automotive Technology/Management, Automotive Technology/General Motors, Chrysler and Nissan, Auto Service Management Technology, Automotive Electronics Technology		<a href="http://www.hawkeyecollege.edu">www.hawkeyecollege.edu</a>	High School Diploma/GED



	Bachelor Degree	Aviation Management, Aviation Technology, Mechanical Engineering Technology, Electrical Engineering Technology, Aerospace Engineering, Mechanical Engineering, Electrical Engineering, Engineering Physics, Automotive Industry, Industrial Engineering, Engineering/Mechatronics	<a href="http://www.uni.edu">www.uni.edu</a> <a href="http://www.uiowa.edu">www.uiowa.edu</a> <a href="http://www.umn.edu">www.umn.edu</a>	See each school's Admissions website.
	Graduate	Aerospace Engineering, MS & PhD, Mechanical Engineering, MS & PhD, Electrical Engineering, MS & PhD, Engineering Management, MS & PhD, Mechanical & Aerospace Engineering, PhD, Engineering Systems, MS	<a href="http://www.uni.edu">www.uni.edu</a> <a href="http://www.uiowa.edu">www.uiowa.edu</a> <a href="http://www.umn.edu">www.umn.edu</a>	See each school's Admissions website.
<b>Cluster Overview:</b> Facility and Mobile Equipment Maintenance Pathway: Careers in the Facility and Mobile Equipment Maintenance pathway include the maintenance, repair, and servicing of vehicles and transportation facilities, as well as the refueling of mobile equipment. All transportation relies on equipment which must function as designed, whenever needed. The people in this pathway keep the equipment and machinery running while looking for more efficient, safe, and cost-effective ways to do so.				
Extended Learning Experiences				
<b>Curricular Experiences:</b> Examples: SkillsUSA		<b>Extracurricular Experiences:</b> Examples: Manufacturer Specific Programs Ford AAA		
<b>Work-Based Learning Experiences:</b> Career Preparation – Paid and Unpaid, Job Shadowing, Internships		<b>Program Accreditation and/or Professional Association(s):</b> Examples: Alliance of Automobile Manufacturers, Automotive Service Excellence, Automotive Parts & Accessories Association, Engine Manufacturers Association, Industrial Truck Association Motor & Equipment Manufacturers Association National Automotive Technicians Education Foundation, Society of Automotive Engineers		
<b>Service Learning Experiences:</b>				
Career Options:				Salary Range:
Certificate	Repairer/Mechanic (Automotive Service, Automotive Body, Rail Car, Ship/Motorboat, Aircraft/Airframe, Electronics)			\$ - \$\$
Associate Degree	Repairer/Mechanic (Automotive Service, Automotive Body, Rail Car, Ship/Motorboat, Aircraft/Airframe, Electronics), Automotive Specialty Technician (Bus, Truck, Diesel, Bicycle, Glass, Tire), Industrial Electrician, Master Mechanic, Mechanical Repair Supervisor			\$-\$\$\$
Bachelor Degree	Facility Maintenance Manager, Logistics Manager, Sales Manager Industrial Engineer			\$\$\$
Graduate	Automotive Engineer Mechanical Engineer			\$\$\$-\$\$\$\$

\* \$ = \$15-25,000; \$\$ = \$25-55,000; \$\$\$ = \$55-90,000; \$\$\$\$ = Above \$90,000