**Table of Contents**

* General Information 2
* Graduation Requirements 3
* Miscellaneous Academic Matters 5
* State University Admission Requirements 8
* NCAA Initial-Eligibility 10
* AP Courses/Concurrent Courses at UHS 11
* Course Offerings 12
* Art 14
* Business Education (Career and Technical Education) 17
* Central Campus/DMACC Opportunities 19
* Computers (Career and Technical Education) 22
* English 23
* Family and Consumer Sciences (Career and Technical Education) 29
* Foreign Language 32
* Interdisciplinary/Integrated 36
* Mathematics 39
* Music 42
* Online AP Classes 43
* Physical Education/Health 46
* Science 48
* Social Studies 52
* STEM 56
* Technology Education/Industrial Technology (Career and Technical Education) 58
* Vocational 60

**General Information**

 **Administrators**

* Brian Coppess Principal
* Tim Carver Associate Principal
* Dania Wilson Assistant Principal
* Bill Watson Activities Director

**Counselors**

* Jill Duffield A - E
* Tracy Edwards F - K
* Darlene Wagner L - Q
* Eric Sackett R - Z

 **Student Fees\***

 **General Fees**

 Books & Materials $90.00

 Student Planner $5.00

 Replacement ID $5.00

 \*Subject to change for 2016-2017

\*\* No student enrolled in the Urbandale Community School District shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination in the District's programs on the basis of race, color, creed, sex, religion, marital status, ethnic background, national origin, disability, sexual orientation, gender identity, or socio-economic background. The policy of the District shall be to provide educational programs and opportunities for students as needed on the basis of individual interests, values, abilities and potential.\*\*

**Graduation Requirements**

**Credits Required for Graduation**

46 credits are required for graduation. In general, a credit represents one semester of study.

**Required Credits**

**English**

English 2 credits

Language and Literature 2 credits

English electives 2 credits

Strand A & B 2 credits

**Social Studies**

Social Studies electives 2 credits

American History 2 credits

American Government 1 credit

Economics 1 credit

**Math** 6 credits

**Science** 6 credits

**Health**

1 semester Health 1 credit

**Physical Education**

4 years/every other day 2 credits

Physical Education is required by state law each year the student is in attendance unless the student is medically excused. Medical excuses for exemption from required Physical Education will be considered on an individual basis, with administrative approval necessary.

 Students must meet state CPR certification requirements for graduation.

**Fine/Practical Arts** 1 credit

**Computer Applications** 1 credit

**Elective Credits**

Electives chosen by the student, with assistance from teachers, parents, and counselors, will complete the total number of credits needed for graduation. Elective credit may include unlimited credits from courses in Art, Business, Computers, English, Family and Consumer Sciences, Foreign Language, Industrial Technology, Interdisciplinary/Integrated, Mathematics, Science, and Social Studies. Most electives are awarded one credit per semester.

Electives chosen by the student, with assistance from teachers, parents, and counselors, will complete the total number of credits needed for graduation. Credits earned from other institutions must be approved by the building principal to count towards graduation requirements.

According to School Board Policy 638.4: "Students who successfully complete high school electives prior to high school may opt to use these credits for high school graduation and subject-specific graduation requirements. Doing so requires written consent from the student’s legal guardian and will result in the course and grade becoming part of a student’s official high school transcript and grade point average."

**Extension Credits**

A student may apply extension credits toward graduation (i.e., college, correspondence, or consortium courses) with the principal's prior approval.

**Early Graduation**

Students are permitted to graduate at the end of eleventh grade or the first semester of twelfth grade provided all graduation requirements are met. Extension credits from other institutions may not be applied towards early graduation, unless approved in advance by the principal. Students must complete their final semester at Urbandale High School in order to qualify for early graduation.

**Miscellaneous Academic Matters**

**CPR Requirements**

 Every student physically able to do so will complete a course that leads to certification in cardiopulmonary resuscitation (CPR). The building administrator may waive this requirement for any student who is not physically able to complete the course. This course work will be available to all students enrolled in UHS PE 11-12 sections. If a student is registered for contract PE, they must still complete CPR training prior to graduation. UHS will offer CPR training as a before school program for students in Contract PE or will accept certification from any nationally recognized course in cardiopulmonary resuscitation as evidence that this requirement has been met by the student. A school or district shall not accept audition of a CPR course not a course in infant CPR only.

**Pass-Fail Option for Seventh Subjects**

 Students desiring to take a seventh subject on a pass-fail basis should check with their counselors. Seniors may request approval to take a sixth subject pass-fail. The pass-fail option applies to elective courses only, and is subject to the approval of the parent, teacher, counselor, and administrator. The pass-fail standards vary from teacher to teacher; students and parents are responsible for knowing each teacher's expectations for the pass-fail option**.** A "Pass" mark does not affect a student's GPA but an "F" grade does affect the GPA. Students receive credits for passing grades only. Teacher and student must agree upon the Pass-Fail or graded option by the sixtieth day of a semester. Exceptions require administrative approval.

**Audit**

 Classes may be audited for no credit. Students are required to fulfill all class requirements. Audit standards vary from teacher to teacher; students and parents are responsible for knowing each teacher’s expectations. They will receive either a grade of "AU" (which does not affect their GPA) or an "F" grade (which does affect their GPA).

**Grading Policy and Procedures**

 1. Semester grades on transcripts will not be changed, except for clerical errors.

 2. Only semester grades affect the cumulative GPA - quarter grades do not.

 3. Students may retake a course as many times as they wish. If attempting a course retake, the student must stay in the course during that attempt or an F will be recorded on the transcript. All such attempts will be recorded on official school transcripts. Only the grade from the most recent retake will be included in the cumulative GPA.

 5. Students should resolve Incomplete grades (IN) within ten school days of the conclusion of a quarter or semester, at which point the appropriate grade will be recorded. (A,B,C,D,F)

 6. If a student does not show a good faith effort in a course and withdraws after the thirtieth day of a semester, the grade will be recorded as a WF on the official transcript (withdrawal with a grade of F). This includes dual credit courses. Deviation from this policy requires administrative approval.

 7. Students may take courses under the Postsecondary Enrollment Options Act.

 8. All AP (Advanced Placement) courses will be using weighted grading. This means every AP course will be graded on a five point scale instead of the normal four point scale: A = 5.0, B = 4.0, C = 3.0, D = 2.0, F = 0. This weighted grading scale will be applied retroactively to all AP courses a student has taken at UHS.

**AP Courses**

 Students are encouraged to take AP courses in areas of interest. It is important for students considering signing up for these courses to realize that AP courses are much more rigorous than a standard course. In comparison to a regular course, an AP student can expect:

 **•more reading**

 **•more written work**

 **•more homework/out of class work**

 **•more challenging problem sets/exams**

 Students taking AP courses are expected to commit themselves fully to the demands of the classroom environment. A successful AP class experience can benefit the student in many ways, including in-depth exposure and experience in the subject area, good preparation for the demands of college life, and college credit. AP courses are not recommended for students who do not or cannot commit themselves to a rigorous course of study.

**Concurrent Enrollment/DMACC Career Advantage Courses**

Students may enroll in a course under concurrent enrollment if the student meets eligibility criteria. Students are eligible for concurrent enrollment courses if they have met the prerequisites, or have been identified as gifted and talented by the District. If a student wishes to enroll in a concurrent mathematics course, they must first take the ALEKS mathematics placement exam. Enrollment will be determined by a student’s acceptable score on this exam. It is recommended that students have obtained a grade point average of 3.5 or higher, a minimum ACT score of 21, or receive school recommendation. Credit will be granted for a course if the student successfully completes the course as determined by the community college and the course was previously approved by the school board as pursuant to 281 – IAC 22.11(3). Students must take the course for college credit. If a student withdraws from a concurrent enrollment course they are also withdrawn from the UHS course, the grade will be recorded as a WF on the official transcript (withdrawal with a grade of F) after the drop date.

**Post Secondary Enrollment Options (PSEO) Courses**

 The PSEO program allows eleventh and twelfth grade students, as well as ninth and tenth grade students identified as gifted and talented, to enroll in college courses. Students may enroll in an eligible postsecondary course if a comparable course is not offered at Urbandale High School. Successful completion of the course generates both high school and college credit and applies toward district subject area graduation requirements. The school district pays the cost of the course, but if a student fails to complete the course and is not eligible for a fee waiver, the student or his/her parent or guardian will be required to reimburse the district’s cost. PSEO courses are offered on the college campus, and may be taken during the school year only. Students wishing to take college courses during the summer will be responsible for all associated costs for tuition and materials.

 Courses eligible for PSEO must not be comparable to any course offered at UHS. Comparable is not synonymous with identical, but means that the content of a course provided to a high school student for PSEO credit shall not consist of substantially the same concepts and skills as the content of a course provided by UHS. PSEO courses must meet the following criteria:

* Credit-bearing courses that lead to an educational degree
* In the area of mathematics, science, social science, humanities, and career and technical education
* Nonsectarian
* Not comparable to courses offered at UHS or through concurrent enrollment programs offered through UHS

**Concurrent Enrollment and Post Secondary Enrollment Options Student Eligibility Requirements**

In addition to specific eligibility requirements outlined in the corresponding sections above, students must meet the eligibility requirements below in order to take a Concurrent Enrollment (DMACC) course or PSEO course:

* The student must be proficient in reading, mathematics, and science as measured by the Iowa Assessments. An exemption to this rule exists for Career Technical Education (CTE) courses. However, a student may be required to complete an assessment administered by the community college to determine the student’s readiness for CTE coursework.
* The student must meet enrollment requirements and minimum performance measures on academic assessments and/or placement exams established by the postsecondary institution.
* The student shall have taken appropriate course prerequisites as determined by the eligible postsecondary institution.
* The student shall have attained approval by the school to register for postsecondary courses.
* The student must be in eleventh or twelfth grade or be identified as gifted and talented by UCSD.

**Associate of Arts Degree**

Students have the opportunity to earn a Liberal Arts Associates degree while still in high school. Please see page 9 for a list of courses required to complete this degree.

**Alternative Credit Earning Courses**

Students reviewed by the student study team may be approved to take alternative credit earning courses at UHS.

**Scheduling Policies**

1. Seniors are required to fill a minimum of seven (6 academic plus P.E) of eight periods. All other students must fill all eight (7 academic plus P.E.) of eight periods in their schedules.

2. Scheduling of UHS classes takes precedence over Postsecondary Enrollment classes. Exceptions require administrative approval.

3. A student's work schedule will not be reason for making a schedule change.

**Course Requirements For Admission To Iowa Regents' Universities\***

 \*Call your college representative for specific information.

**Associates of Arts Degree List**

**NCAA Initial-Eligibility**

The NCAA Clearinghouse recommends that you file eligibility forms online at www.NCAAClearinghouse.org at the beginning of your sophomore year if you intend to participate in Division I or Division II college athletics.

The NCAA has approved the following courses for use in establishing the initial-eligibility certification status of student-athletes from this school.

NCAA legislation permits a student to receive credit for a core course only one time. As a result, if a student repeats a core course, the student will receive credit once for the core course and the highest grade earned in the course will be included in the calculation of the student's core-course grade point average. Likewise, if a student completes a course that is duplicative with another core course, the student will only receive credit once for the core course and the highest grade earned in the course will be included in the calculation of the student's core-course grade point average.

**NCAA Approved Core Courses**

**ENGLISH**

Composition/Adv

Composition/Adv II

English/Adv English

English Lit/AP

English Language & Comp/AP

American Lit and Writing

Language/Literature

Public Speaking

Adv English

Adv Lang/Lit

Heroes

Sports Literature & Writing

Power of Persuasion in Lit & Writing

Modern History Through Lit & Writing

Creative Writing

Multicultural Lit

Reading & Writing for the Stage

**NATURAL/PHYSICAL SCIENCE**

Biology (Lab)

College AP Biology (Lab)

College Chemistry (Lab)

Chemistry/AP

Chemistry (Lab)

Environmental Sci (Lab)

Environmental Sci/AP (Lab)

Human Anatomy & Physiology (Lab)

College Physics (Lab)

Physics/AP (Lab )

\*Pending NCAA Approval:

Earth & Space Science

Physical Science

**MATHEMATICS**

Algebra 1

Algebra 2

Algebra IA (.5 credit max)

Algebra 1B (.5 credit max)

Applications of Algebra

Calculus/AP

Pre-calculus

Geometry

Probability & Statistics

Statistics/AP

Trigonometry

Honors Alg II & Trig

**SOCIAL SCIENCE**

Am Government

Am Government/Econ/AP

Am History/AP

American History

Cultural Geography 1

Cultural Geography 2

World Issues

Economics

European History/AP

Human Geography/AP

Psychology

Psychology/AP

Sociology

World History/Ancient

Macroeconomics/AP

Microeconomics/AP

Non-Western World Hist

Euro World History: Ren to Present

|  |
| --- |
| **ADDITIONAL CORE COURSES** |
| Advanced JapaneseGerman 1,2,3,4Formal JapaneseJapanese 1,2Modern JapaneseTraditional JapaneseSpanish 1,2,3,4,5Adv Spanish 3,4 |
|  |

The NAIA Eligibility Center will begin registering high school students interested in playing NAIA college sports.  Every student interested in playing NAIA sports beginning with the 2011-12 school year MUST register with the NAIA Eligibility Center.  You can find out more information about this and register at <http://www.playnaia.org/>

|  |  |
| --- | --- |
| **AP Courses Offered at UHS** | **Concurrent Enrollment Courses Offered at UHS****(With DMACC Approval)** |
| AP Environmental ScienceAP English LiteratureAP CalculusCollege AP BiologyAP European HistoryAP American HistoryAP American Government and EconomicsAP PsychologyAP Human GeographyOnline AP ChemistryOnline AP English Language and Comp Online AP Physics BOnline AP StatisticsOnline AP MacroeconomicsOnline AP Microeconomics | Advanced Composition IAdvanced Composition IIAdvanced JapaneseAdv Spanish III Adv Spanish IV AP English LiteratureAP CalculusCollege AP BiologyCollege Chemistry College ComputersCollege PhysicsComputer Science PrinciplesIntroduction to Engineering DesignMarketing EdMarketing Ed InternshipMultimedia w/ Basic Presentation Software PhotographyPre-CalculusPrinciples of Engineering: Applied PhysicsPublic Speaking |
|  |  |

**Course Offerings**

Art

**S** Art Exploration

**S** Three-Dimensional Art

**S** Two-Dimensional Art

**S** Studio Art (I, II, III, IV)

**S** Photography

**S** Photography II

**S** Ceramics

**S** Animation I

**S** Animation II

**S** Digital Graphic Design

**S** Adv Drawing & Painting

Business Education

**S** Introduction to Business

**S** Entrepreneurship/Business Mgmt.

**S** Sports and Entertainment Marketing

**Y** Accounting

**Y** Advanced Accounting

**Y** Marketing Education

**Y** Marketing Education Internship

**S** Business Law

Computer

**S** Computer Applications I

**S** Exploring Computer Applications

**S** College Computers

**S** Multimedia W/Basic Software

**Y** Computer Science Principles

English

**Y** English

**Y** Advanced English

**Y** Language and Literature

**S** American Literature & Writing

**Y** AP English Literature

**S** Public Speaking

**S** Advanced Composition

**S** Advanced Composition II

**S** English-Reading\*

**Y** Life Skills - English\*

**S** The LifeLong Learner 1

**S** The Life Long Learner 2

**Y** Adv Lang/Lit

**S** Heroes

**S** Modern History Through Lit & Writing

**S** Power of Persuasion in Lit & Writing

**S** Sports Literature & Writing

**S** Creative Writing

**S** Multicultural Literature & Writing

**S** Reading & Writing for the Stage

Family and Consumer Sciences

**S** Foods and Nutrition

**S** Foods and Nutrition 2

**S** Advanced Foods

**S** Textiles and Clothing

**S** Textiles and Clothing 2

**S** Child Growth and Development

**S** The School Age Child

**S** Housing and Interior Design

**S** Family Life

**S** Adult Living

Foreign Language

**Y** German I

**Y** German II

**Y**  German III

**Y** German IV

**S** German Experience Abroad

**Y** Japanese I

**Y** Japanese II

**S** Modern Japanese

**S** Formal Japanese

**S** Traditional Japanese

**S** Advanced Japanese

**Y** Spanish I

**Y** Spanish II

**Y** Spanish III

**Y** Spanish IV

**Y** Spanish V

**Y** Adv Spanish III

**Y** Adv Spanish IV

Interdisciplinary/Integrated

**S** Cultural Issues

**S** Drama

**Y** ESL\*

**Y** ESL Resource\*

**S** Journalism 1\*

**S** Journalism 234

**Y** RECESS\*

**Y** Resource\*

**S** Service Learning\*

**S** Student Teams

**S** Extended Learning Program\*

**Y** Yearbook

Mathematics

**Y** Basic Math

**Y** General Math

**S** Consumer Math I

**S** Consumer Math II

**Y** Algebra I A

**Y** Algebra I B

**Y** Algebra I

**Y** Geometry

**Y** Algebra II

Y Honors Algebra II/Trig

**S** Trigonometry

**S** Probability and Statistics

**Y** Applications of Algebra

**Y** Pre-Calculus

**Y** AP Calculus AB

**Y** Life Skills - Math\*

Music

**Y** Band

**Y** Jazz Band

**Y** Women’s Choir/Men’s Choir

**Y** Treble Choir

**Y** Urbandale Singers\*

Online AP Classes

**Y** AP Chemistry

**Y** AP English Language & Composition

**Y** AP Physics B

**Y** AP Statistics

**Y** AP Macroeconomics

**Y** AP Microeconomics

Physical Education, Health

**Y** Physical Education 9/10

**Y** Physical Education 11/12

**Y** Contract Physical Education

**S** Health

**S** Wellness for Life

Science

**Y** Biology

**Y** Physical Science (pending approval)

**Y** Earth and Space Science (pending approval)

**Y** College AP Biology

**Y** Environmental Science

**Y** Chemistry

**Y** College Chemistry

**Y** College Physics

**Y** Principles of Engineering: Applied Physics

**Y** Human Anatomy & Physiology

**Y** Life Skills - Science\*

**Y** AP Environmental Science

Social Studies

**S** Cultural Geography I, II

**Y** AP Human Geography

**S** World Issues

**S** World History: Ancient

**S** Euro World History: Ren to present

**Y** AP European History

**Y** American History

**Y** AP US History

**S** American Government

**Y** AP US Govt/Economics

**S** Economics

**S** Psychology

**S** Sociology

**Y** AP Psychology

**Y** Life Skills – Social Studies\*

**S** Non-Western History

Technology Ed./Industrial Technology

**Y** Computer Design and Animation

**S** Woodworking Technology

**S** Woodworking Technology II

**S** Building Construction

**S** Cabinetmaking and Millwork

**Y** Intro to Engineering and Design

**Y** Principles of Engineering

Vocational

**S** EBCE (Experience Based Career Exploration)\*

**Y** Occupational Social Skills

**S** Work Experience**\***

**Y** SBVT\*

**Y** – indicates a year long course

**S** – indicates a semester course

\*-Teacher recommendation

**ART**

**Art Exploration**

**Credit: 1**

**Prerequisite: None**

This art class is designed to provide introductory experiences working with various art forms. The students will learn beginning techniques in various materials and produce art forms such as sculpture, painting, and drawing. Students continue to examine artists and their work and their cultural and historical aspects to encourage student understanding and ultimately expression and production of art as well as an increased awareness of the purposes and value of art; to communicate, to express, and to enhance aesthetic awareness.

**Three-Dimensional Art**

**Credit: 1**

**Prerequisite: Art Exploration with a C or above**

This course will give students the opportunity to develop skills in the creation of art using height, width,

and depth. Materials used in class will include clay, paper-mâché, plaster, wood, wire, found objects, and combinations of these media.

Three-dimensional techniques include both additive and subtractive methods of building.

Students will build on existing knowledge of these materials and process and improve their skills and proficiency while exploring new techniques to enhance their ability to communicate and be creative.

**Two-Dimensional Art**

**Credit: 1**

**Prerequisite: Art Exploration with a C or above**

This class will focus on giving students solid understanding and skill development in the fundamentals of producing ‘flat’ art. This course is designed under the philosophy that all students who have the basic coordination to legibly write, should be able to have success in producing 2D artworks. Emphasis is on learning to see as an artist and then applying this skill to both dry and wet media. 2D Art begins with basic perception exercises and builds up to using various advanced techniques and media. The topics covered in 2D Art are fundamental to success in creating all forms of visual artworks.

**Studio Art (I, II, III, IV)**

**Credit: 1**

**Prerequisite: 5 Art Courses (B or higher/Instructor approval), Studio I (B or higher)**

 **Grade Level: 11-12**

This class is designed for a Junior or Senior student who desires to build a portfolio in art who has successfully completed five art classes with a B or higher or with Instructor approval. The student will work to excel in advanced art techniques in both two-dimensional and three-dimensional art. This course is designed to allow a continuation in the study of art for the serious art students and therefore may be scheduled for an additional three semester credits upon successful completion of Studio Art with a B or higher or with Instructor approval.

**Photography**

**Credit: 1 UHS + 3 DMACC**

**Prerequisite: Art Exploration (B or higher/Instructor approval)**

 **Grade Level: 10-12**

This photography course is designed to provide students with rich and meaningful experiences using digital photography in the visual arts. Student produced work can be used to create a photographic portfolio and may serve as a springboard to encourage further student exploration into photography. Additionally, the production of photographs is relevant to the student in terms of understanding the purposes of art-communication, self-expression and aesthetic awareness. **Photography corresponds to ART 186 in the DMACC course guide.**

**Photography II**

**Credit: 1**

**Prerequisite: Art Exploration, Photography (C or above/ Instructor approval)**

**Grade Level: 11-12**

This advanced photography course is designed to provide students with rich and meaningful experiences using digital photography in the visual arts. Student produced work can be used to create a photographic portfolio and may serve as a springboard to encourage further student exploration into photography.

**Ceramics**

**Credit: 1**

**Prerequisite: Art Exploration, 3D Art, (B or higher/ Instructor approval)**

**Grade Level: 11-12**

This introductory ceramics course is designed to provide students an opportunity to explore the medium of clay. Projects will include the creation of functional vessels as well as sculptural pieces and tiles. Tasks will range from simple hand-building techniques such as coil and pinch pots to more advanced techniques such as slab building, extruding pieces, and wheel thrown pieces. In addition to working with and learning the properties of clay, students will get experience using under glazes and glazes to visually enhance their work.

**Animation I and II**

**Credit: 1**

**Prerequisite: 2 Art Courses**

**Grade Level: 10-12**

Animation will focus on giving students the opportunity to develop skill in effectively communicating through the process of animation. The main focus of the class will be in using the 12 principles of animation to produce finished products in a range of possible animation techniques. Some of the possible types of animation could include (but are not limited to) stop motion, hand drawn, computer generated, and photographic animation. Students will learn about effective historical and contemporary examples of animation, as well as the discipline’s different career paths. Due to the nature of animation, this class will have a heavy focus on collaboration and various forms of critique.

**Digital Graphic Design**

**Credit: 1**

**Prerequisite: 3 Art Courses (Art Expo and Photography: C or higher/instructor approval)**

This course focuses on fundamental principles and techniques for effective visual composition in print or multimedia applications for Graphic Design. Students will learn the art of applying dynamic design to various forms of visual communications. By working individually and in small groups students will be asked to creatively solve design problems using hands-on and digital activities/projects. Students will learn to control color, type, symbols, images, and photography to inform, persuade and visually entice the viewer. Students will learn techniques for creating, revising, and producing images using Adobe Photoshop.

**Advanced Drawing and Painting**

**Credit: 1**

**Prerequisite: Art Exploration and 2D Art with a C or higher/ Instructor Approval**

 **Grade Level: 10-12**

This course will build on the skills and concepts emphasized in 2D Art. The emphasis is on practical application of processes and skills in drawing, rendering, and painting at an advanced level. A wide range of subject matter will be addressed and creative use of skills will be encouraged. Historical and cultural examples will be infused throughout the class to encourage inspiration and depth in student artwork.

**Art Flow Chart**

**BUSINESS EDUCATION**

**(Career and Technical Education)**

**Introduction to Business**

**Credit: 1**

**Prerequisite: None**

Introduction to Business serves as a starting point for students interested in the world of business. All other business classes at UHS build from the information provided in this class. Students will cover a variety of business related topics including leadership, careers, banking, consumerism, and technology. This course is highly recommended for freshmen and sophomores.

**Entrepreneurship/Small Business Management**

  **Credit: 1**

**Prerequisite: 10-12**

In this class students will select a product or service to sell and develop a business plan. They will also learn how to obtain financing and project the financial resources needed tor your business venture. Students will identify the characteristics of successful entrepreneurs and understand the forms of ownership and steps necessary to get a business up and running. They will explore how to manage their business once it is started and they will explore the role of small business in the global economy. Technology skills will be infused into this curriculum.

**Sports and Entertainment Marketing**

**Credit: 1**

**Prerequisite: 10-12**

Sports and Entertainment Marketing provides students with a detailed understanding of how marketing addresses domestic and global concepts relevant to all marketers, specifically in the entertainment and sports industries. Students will study the seven functions of marketing: Channel Management, Pricing, Marketing information Management, Product/Service Management, Promotion, Selling, and Market Planning.

**Business Law**

**Credit: 1**

 **Prerequisite: Recommended for 11-12**

Business Law is an upper level course which provides students with a thorough, basic, working knowledge of the law and trains students to observe both potential and actual events from a legal perspective. This course is designed to stimulate curiosity about the legal process and to raise the student’s consciousness about the importance of viewing real life problems in a legal context. Students enrolling in this course should possess strong verbal skills, as well as the ability to convey ideas in written forms. Business Law is recommended for juniors and seniors, but sophomores may be admitted with the approval of the teacher.

**Accounting**

**Credit: 2**

**Prerequisite: Recommended for 10-12**

In Accounting, basic accounting procedures are developed and practiced through the use of business papers and practice sets. Instruction is given in the preparation and use of journals, ledgers, checking accounts and financial statements. Also included are such topics as payroll, personal income tax preparation, depreciation of plant assets, petty cash, inventory systems, and journal usage. The course is designed to give the student an understanding of the "language of business" and to prepare students for further study in the area of business at the high school and post-secondary level. The role of computers in accounting is also introduced. It isrecommended that students interested in pursuing business as a career take this class as a junior. This allows for Advanced Accounting to be taken as a senior.

**Advanced Accounting**

**Credit: 2**

**Prerequisite: Accounting**

The purpose of Advanced Accounting is to expand on topics learned in Accounting I, while adding new topics about management accounting, cost accounting, not-for-profit accounting, and financial analysis. The study of a second year of accounting assists students in qualifying for jobs and careers at higher levels than one year of study would allow. It is also excellent preparation for college business and accounting courses and business majors. Automated accounting will be used in this course. Software provided with the textbook will be used, and spreadsheet software will be used to make financial reporting and analysis more efficient.

**Marketing Education**

**Credit: 2 + 5 DMACC**

**Prerequisite: Seniors only and completion of one of the following classes: Sports and Entertainment Marketing, Business Law, Entrepreneurship, or Accounting**

The Marketing Education class will provide instruction in a classroom setting. Marketing Education students will study a variety of subjects which will include: self-assessment, exploring careers, finding a job, joining the workforce, professional development, life skills, and lifelong learning. Classroom opportunities include entry-level requirements for succeeding and progressing on the job and application of classroom learning to an internship in a chosen career area. **Marketing Education corresponds with ADM259 and ADM 221 in the DMACC course guide.**

**Marketing Education Internship**

**Credit: 2 + 3 DMACC**

**Prerequisite: Seniors only and Sports and Entertainment Marketing or Principles of**

 **Marketing**

The Marketing Education Internship is a cooperative arrangement between student, school, and employer. The goal of the internship is for students to receive work supervised work experience and evaluation by professionals in the work force. Students will apply what they learn in class to their work-site. Students will work 120 hours to receive the DMACC Credit for Supervised Practical Experience. **Marketing Education corresponds with ADM936 in the DMACC course guide.**

**CENTRAL CAMPUS/DMACC**

By arrangement with DMACC and the Des Moines Independent School District, Urbandale High School students are welcome to take courses offered at Des Moines Central Campus. Course credit will be applied to your graduation requirements at Urbandale High School. Students may select from a wide variety of course opportunities to enrich their high school experience. They will attend one-half day at Central Campus/DMACC and one-half day at Urbandale High School. One period each day is required for travel time.

**For more information**, contact your counselor at your school. The courses listed are not finalized and may or may not all be offered in 2015-2016.

***CENTRAL CAMPUS***

**Auto Collision Repair**

*Year One*

Sheet Metal Welding

 Shop Safety

 Sheet Metal Fundamentals

 Applied Mathematics

*Year Two*

Estimating Theory

 Principles of Refinishing

**Automotive Technology**

*Year One*

Shop Fund & Minor Service

 Automotive Engine Fundamentals

 Auto Brake Systems & Service

 Auto Electricity/Electronics

 Applied Mathematics

*Year Two*

Basic Suspension & Steering

 Adv Automotive Electricity

 Welding for Automotive Mech

**Aviation Technology**

*Year One*

Materials & Processing

 Aircraft Drawings

 Cleaning & Corrosion Control

 Weights & Balances

 Regulations & Publications

Ground Ops & Services

 Fluid Lines % Fittings

 Applied Mathematics

*Year Two*

Aircraft Welding

 Landing Gear & Brakes

 Instruments & Fire Protection

 Structure & Repair

 Aircraft Assembly & Rigging

 Airframe Fuel Systems

*Year Three*

Aircraft Electrical Systems

 Comm. & Navigation Systems

 Air Frame and PP Insp.

 Cabin Control Systems

 Weather & Warning Systems

 Instruments & Fire Protection

 COOP Seminar

 Career Experiences

**Adv Broadcasting and Film**

*Year One*

Professional Office Careers

*Year Two*

Professional Development

 Fundamentals of Oral Communication

**Graphic Communication**

*Year One*

Graphic Design Orientation

 Introduction to Printing Methods

 Communications Skills

*Year Two*

Introduction to Desktop Publishing

 Introduction to Printing Methods

 Methods of Graphic Arts

 COOP Career Seminar

 COOP Career Experience III

**Horticulture/Animal Science**

*Year One*

Survey Of Animal Industry

 Introduction to Greenhouse

 Pre-employment Strategies

*Year Two*

Introduction to Veterinary Technology

 Horticulture Internship

 Selling

 Residential Landscape Design

 Survey of Aquaculture Industry

**J.R.O.T.C.**

 (2 credits plus PE Credit)

 \*Students are expected to take Health at UHS

**Marine Biology**

*Year One*

Marine Biology I

 Marine Biology II
 Biology Field Experience

*Year Two*

Career Seminar

 Career Experience

 Biology Field Experience II

**Painting & Drywall Technology**

*Year One*

Care and Use of Hand/Power Tools

 Communication Skills

*Year Two*

Construction Blueprint Reading

 Career Work Seminar

 Work Experience

**Welding**

Welding for Automotive Mechanics

 Oxygen-Acetylene Welding & Cutting

 Communications Skills

**Anatomy & Physiology/Biotech in Med.**

Anatomy & Physiology

 Anatomy & Physiology II

 Electronic Portfolio

 Introduction to Biology

 Intro to Biotechnology

**Aquarium Science**

Aquaculture/Aqua Science I

 Aquaculture/Aqua Science II

 Electronic Portfolio Development

***DMACC Career Advantage***

**Automotive Collision**

Basic Shop Safely

Sheet Metal Fundamentals

 Principles of Refinishing

 Estimating Theory

 Sheet Metal Welding

**Automotive Technology**

*Year One*

 Shop Fund & Minor Service

 Auto Electricity/Electronics

 Automotive Engine Repair

*Year Two*

Basic Auto Power Trains

 Adv Auto Power Trains

 Basic Suspension & Steering

 Auto Electricity/Electronics

**Business Administration**

Business Law

 Small Business Management

 Intro to Business

 Study Strategies

 Personal Finance

 Accounting I

**Criminal Forensics**

Intro to Criminal Justice

 Criminal Investigation I

 Survey Criminal Justice Agencies

 Scientific Investigation

 Crime Scene Investigation

**Culinary Arts**

*Year One*

Food Preparation I

 Food Preparation II Lab

 Sanitation and Safety

 Food Preparation II

 Food Preparation II Lab

*Year Two*

Nutrition

 Dining Management

 Intro to Hospitality Industry

 Work Experience

 Menu Planning & Design

 Communication Skills

**Diesel**

Power Trains I

 Hydraulics & Brakes

**Health Science Specialist**

Nurse Aid 75 Hours

 Advanced Nurse Aide

 Emergency Care

 Survey of Health Careers

 Intro to Health Careers

 Medical Terminology

**Machine Operations/Tool & Die**

Engine Lathe Theory

 Engine Lathe Operations Lab

 Mill Operations Theory

 Mill Operations Lab

 Machine Shop Measuring

 Mach Trade Print Reading I

**Web Page Design**

 Communication Design iPhotoshop

 Intro to Website Development

 Interactive Media I

 Interactive Media II

**Computer Programming**

Survey of Mobile Device Technology

 The Business of App Development

Mobile User Interface Design

 Intro to Programming w/Logic

 Intro to Game Design

 Java or CIS161 C++

**Project Lead the Way**

 Civil Engineering & Architecture

 Digital Electronics

 Digital Electronics Lab

**COMPUTERS**

**(Career and Technical Education)**

**Computer Applications**

**Credit: 1**

**Prerequisite: None**

Computer Applications will prepare students to function in an environment where computer confidence has become the expected norm. This class will develop students’ ability to analyze, evaluate, and apply technologies in real world situations. Students develop hands-on skills in using common software applications, including word-processing, spreadsheet, desktop publishing, and presentation software.

**Exploring Computer Applications**

**Credit: 1**

**Prerequisite: Instructor approval only**

Exploring Computer Applications provides students with limited exposure to technology the opportunity to build basic typing and computer application skills. The class will focus on developing and improving typing skills, introduction to word processing applications and functions, and applications for presentation. Enrollment is restricted pending teacher approval.

**College Computers**

**Credit: 1 UHS + 3 DMACC**

**Prerequisite: Computer Apps**

**Grade Level: 11-12**

The focus is to use hardware and software business productivity tools. This course builds on skills learned in Computer Applications.. Class is accelerated and project-based. Training includes a hands-on introduction to microcomputer applications vital in today’s business and industry. It focuses on operating system, e-mail, internet, word processing, spreadsheet, database, and presentation software applications. **College Computers corresponds to BCA 212 in the DMACC course guide.**

**Multimedia with Basic Presentation Software**

**Credit: 1 UHS + 1 DMACC**

**Prerequisite: Computer Apps**

**Grade Level: 10-12**

The Multimedia course is designed to build upon the computer knowledge gained

through completion of the Computer Applications. Multimedia explores

the hardware and software components used to produce and manipulate sound, text,

graphics, photographs, and video. Students will also construct and utilize PowerPoint as a

Multimedia presentation tool. Students must meet the requirements to enroll in a DMACC course.

\*It is highly recommended that Computer Applications II be taken before Multimedia

**Multimedia corresponds to BCA 174 Basic Presentation Software in the DMACC course guide.**

**Computer Science Principles**

**Credit: 2 UHS + 3 DMACC**

**Prerequisite: C or better in both semesters of Algebra I**

This one year course introduces computer science (coding), and emphasizes algorithm design and implementation using conditionals, loops, functions, recursion, and object oriented programming. The course will be taught in Python and will use the Python library to enable students to learn coding by creating a variety of video arcade style games. The course will consist primarily of project-based learning and students will continually be updating a portfolio containing artifacts of the programming skills they have achieved. Students taking this course should have an interest in math, science, and technology and have a desire to make a lot of money doing something fun! **This course corresponds to CIS450 in the DMACC course guide**

**ENGLISH**

**English**

**Credit: 2**

**Grade Level: 9**

This is a survey course which introduces the student to a wide range of English subject areas. The study of literature includes short stories, novels, poetry, and plays. Composition is an integral part of the literature program. Grammar and usage are formally studied and stressed in all aspects of speaking and writing. Speaking and vocabulary development are included.

**Advanced English**

**Credit: 2**

**Prerequisite: Students must earn at least an A- in 8th grade English for both semesters or teacher recommendation**

**Grade Level: 9**

This course is designed for students who have strong writing and reading skills and desire more challenge in their English curriculum. Advanced students will study literature that includes short stories, novels, poetry, and plays. Composition is an integral part of the literature program. Grammar and usage are formally studied and stressed in all aspects of speaking and writing. Speaking and vocabulary development are included. Other supplementary activates may include book reviews, literature circles, writing critical essays and creative short stories.

**Language and Literature**

**Credit: 2**

**Prerequisite: 10**

Language and Literature includes a focus on the written and oral practice of literature and language skills.  The student will explore expository, descriptive and persuasive writing.  The study of literature could include short stories, poetry, drama, a novel, and nonfiction.  The study of speech includes informative and persuasive speeches.   Grammar and vocabulary development are included.

**Advanced Language and Literature**

**Credit: 2**

**Prerequisite: Students must earn at least an A- in 9th grade English or a B- in Advanced English for both semesters and/or teacher recommendation**

This course is designed for students who have strong writing and reading skills and desire more challenge in their English curriculum. Advanced Language and Literature includes a focus on the written and oral practice of literature and language skills.  The student will explore expository, descriptive and persuasive writing.  The study of literature could include short stories, poetry, drama, a novel, and nonfiction.  The study of speech includes informative and persuasive speeches.   Grammar and vocabulary development are included.

**Public Speaking**

**Credit: 1 UHS + 3 DMACC**

**Prerequisite: 11-12**

Public Speaking enables students to gain confidence in their speaking abilities. The forms of informative and persuasive speaking are studied. Students will study vocabulary, speech organization, and interpersonal communications. They will also explore multi-media aspects of speaking, which may include numerous presentation programs and on-camera speaking. **Public Speaking corresponds to SPC 101 in the DMACC course guide**.

**Life Skills-English**

**Credit: 2**

**Prerequisite: Teacher Approval**

Life Skills-English is designed to develop an understanding of reading, comprehension, and utilizing written language. These skills correlate with life skills needed during their high school career as well as with their post-secondary transition. Students will utilize these skills in a variety of ways.

***STRAND A CLASS:***

**Credit: 1**

**Prerequisite: Students are required to take at least one Strand A and Strand B course throughout their junior and senior year. The other two English Classes are student choice.**

Strand A will have a persuasive and nonfiction emphasis. This will be covered across reading, writing, language, speaking, and listening skills.

**Sports Lit & Writing**

**Credit: 1**

**Prerequisite: 11-12**

This course primarily focuses on nonfiction literature and nonfiction writing. Literary experiences may include reading autobiographies, memoirs, essays, speeches of renowned coaches and athletes: examining documentary story structure: studying visual literacy through the evaluation of photojournalism and videography storytelling: analyzing sports reporting on both TV and radio: writing a research paper on relevant and current sports related issues: and discussing the history of influence sports have had on our culture. Additional experiences may include interviews with guest speakers from local collegiate and semi-professional athletes, coaches, owners, trainers, and journalists: creative nonfiction and fiction writing; advertising writing; persuasive writing; and reading of poetry, essays, and articles.

**Power of Persuasion in Literature and Writing**

**Credit: 1**

**Prerequisite: 11-12**

This is a nonfiction course that will explore the persuasive techniques authors use.  Students will read a variety of essays, articles, and nonfiction readings to analyze the author’s intent in influencing the audience.  Student experiences may include persuasive research writing, rhetorical analysis, persuasive speeches and other formative learning opportunities to analyze and provide written response.

**Modern History Through Literature and Writing**

**Credit: 1**

**Prerequisite: 11-12**

This course explores the major twentieth century historical, political, and social events through historical readings with an emphasis on nonfiction.  Students will look at the context of these events and how they influenced the author’s perspective and writing.  Students will analyze text through writing a rhetorical analysis and a persuasive research paper.

**Heroes**

**Credit: 1**

**Prerequisite: 11-12**

The qualities of heroes and their impact on a culture will be defined in this course. Students will study their own heroic journey thought the analysis of fictional and non-fictional hero stories. We will work towards a deeper understanding of how the individual can have a powerful impact on our world, and how the heroic acts of individuals can inspire all of us using numerous media (newspapers, magazine articles, and other pieces of non-fictional works). Reading may be drawn from a variety of areas including myths, legends, and contemporary culture. Writings may include personal narrative or memoir writing, persuasive writing, and informative writing.

**Advanced Composition**

**Credit: 1 UHS + 3 DMACC**

**Prerequisite: Students must earn at least an B- or better in a Strand A course**

This college-level course is designed for students who wish to gain proficiency and confidence in writing developed through critical reading. Experience will be enhances in all kinds of writing: personal essays and narratives, analytical essays, persuasive essays, and a research essay. **Advanced Composition corresponds to ENG 105 in the DMACC course guide.**

**Advanced Composition II**

**Credit: 1 + 3 DMACC**

**Prerequisites: B- or better in Advanced Composition and/or teacher recommendation**

Advanced Composition II offers highly motivated students an opportunity to study a college-level English curriculum consisting of expository and persuasive writing developed through critical reading. The course places strong emphasis upon composition skills and written interpretation by exploring structure, style, research, and documentation. **Advanced Composition II corresponds to ENG 106 in the DMACC course guide**.

**The Life Long Learner II**

**Credit: 1**

**Prerequisite: 11-12 and Teacher Recommendation**

The Life Long Learner II course provides students a study of a wide selection of informational reading with an additional focus on research project and visual literacy. Reading may include graphic design, movie analysis, and documentaries. Students also learn forms of writing in the working world. Writings may include resumes, job applications, and business forms.

**Life Skills-English**

**Credit: 2**

**Prerequisite: Teacher Approval**

Life Skills-English is designed to develop an understanding of reading, comprehension, and utilizing written language. These skills correlate with life skills needed during their high school career as well as with their post-secondary transition. Students will utilize these skills in a variety of ways.

***STRAND B CLASS:***

**Credit: 1**

**Prerequisite: Students are required to take at least one Strand A and Strand B course throughout their junior and senior year. The other two English Classes are student choice.**

Strand B will have a fiction and narrative emphasis. This will be covered across reading, writing, language, speaking, and listening skills.

**AP English Literature and Composition**

 **Course Length: 1 year**

**Credit: 2 + 6 DMACC**

**Prerequisite: 11-12 graders with a B+ or better English average, or teacher recommendation**

Advanced Placement (AP) English Literature and Composition offers highly motivated students an opportunity to study a college-level English curriculum consisting of challenging literature from a variety of genre, cultures, and eras. Strong emphasis is placed upon composition skills and written interpretation with the objective of preparing students to successfully complete the AP English Literature and Composition Exam. This year long course is a dual credit class with Des Moines Area Community College**. During the first semester students completing the course will demonstrate the DMACC competencies and will earn 3 credit hours with DMACC for LIT101 Introduction to Literature in addition to UHS graduation credits. During the second semester students completing the course will demonstrate the DMACC competencies and will earn 3 credit hours with DMACC for LIT185 Contemporary Literature.**

**American Literature & Writing**

**Credit: 1**

**Prerequisite: 11-12**

American Literature explores the major literary works in the United States between the 1600’s to contemporary documents of today. The use of American short stories, poetry, and essays/nonfiction will guide the students in their study of how American authors influenced and reacted to events in our country’s history. Students will respond to these works through writings which may include journal writings, personal reflections, and critical essays.

**The Life Long Learner 1**

**Credit: 1**

**Prerequisite: 11-12 grade or Teacher Recommendation**

The Life Long Learner I course provides students a study of a wide selection of fictional reading with an additional focus on visual literacy (Readings may include painting, photographs, and graphic novels.). Students also learn forms of writing in the working world (Writings may include blogging and journaling).

**Multicultural Literature & Writing**

**Credit: 1**

**Prerequisite: 11-12**

Students will study historic and modern masterpieces from around the world. Students may read a variety of short stories, poems, and novels to deepen their understanding of different world cultures and to see their similarities and differences. Strong emphasis is placed upon written interpretation and analysis.

**Creative Writing**

**Credit: 1**

**Prerequisite: 11-12**

Creative Writing focus on imaginative writing style which could include short stories, poetry, and creative nonfiction. Writing skills will be developed through daily writing and analysis of quality writing. Students will practice reading and responding to literature in all different stages of the writing process. A final summative portfolio of the work will show writing growth over the semester.

**Reading and Writing for the Stage**

**Credit: 1**

**Prerequisite: 11-12**

Reading and writing for the Stage will explore, read, and respond to plays written during major periods of dramatic history. Students will respond to these plays through writing, which may include journal entries, literary analysis, play reviews or their own original scripts. Students will explore the major historical events and dramatic theories surrounding each play. Students will also communicate their understanding of these plays through presentation of their ideas, which may include presenting sets designs, costume designs, monologues, or their own opinions of the author’s works.

**English Flow Chart**

**FAMILY & CONSUMER SCIENCES (Career**

**and Technical Education)**

**Foods and Nutrition**

**Credit: 1**

**Prerequisite: None**

Foods and Nutrition is a basic course in nutrition, food preparation, and meal management. Emphasized are the benefits of proper nutrition, kitchen math and measurements, recommended food preparation and handling techniques. Skills are developed in the preparation of a variety of foods. This course articulates with Iowa community colleges.

**Foods and Nutrition 2**

**Credit: 1**

**Prerequisite: Food and Nutrition with a C or better**

Foods and Nutrition 2 students have the opportunity further develop their skills in food preparation and nutrition information. Continued emphasis on the benefits of proper nutrition, kitchen math and measurements, recommended food preparation and handling techniques.  In this course students will be engaged in more hands on experiences in the kitchen around these concepts.

**Advanced Foods**

**Credit: 1**

**Prerequisite: Foods and Nutrition 2 with a C or better**

Advanced Foods, students will have the opportunity to develop advanced food preparation skills while applying knowledge and skills learned in Foods and Nutrition and 2.  Students will get the opportunity to explore cultural cuisines and careers within the foods' industries.  This course engages students with many hands on experiences in the kitchen labs.

**Textiles and Clothing**

 **Credit: 1**

**Prerequisite: None**

Textiles and Clothing provides an introduction to clothing selection and care, textiles, fabrics, and patterns. Students construct clothing or other textile products using appropriate equipment and techniques. Construction projects are based on individual abilities in order to develop basic sewing and serging skills or to improve existing skills.

**Textiles and Clothing 2**

**Credit: 1**

**Prerequisite: Textiles and Clothing with a C or better**

Textiles and Clothing 2 explore textiles, clothing design, the fashion industry, fashion merchandising and retailing, and entrepreneurship. Students have the opportunity to further develop their clothing construction skills using a standard sewing machine, serger, and a computerized embroidery sewing machine.

**Child Growth and Development**

  **Credit: 1**

**Prerequisite: None**

Child Growth and Development is the study of human development from conception through adolescence. Students identify social, physical, intellectual, and emotional developmental milestones for each age level while focusing on the responsibilities of parents, families, and caregivers to nurture the development of children. Opportunities to interact with children are provided throughout this course, which is designed to articulate with Iowa community colleges having child care programs. Students are given the opportunity to participate in a parenting simulation.

**The School Age Child**

 **Credit: 2 (2-period block)**

 **Prerequisite: Child Growth and Development with a C or better. Students must**

 **provide their own transportation to and from their assigned school.**

 **Grade Level: 11-12**

The School Age Child studies human development during the elementary years. Students identify the mental, physical, social, and emotional developmental characteristics of children as well as suggest how development can be encouraged. Students will be placed in an elementary or middle school to work directly with a classroom teacher. The class will meet for two periods each day. One day a week students will meet with their assigned instructor at the high school. During the remainder of the week, the students will meet in their assigned schools. The purpose of the course is to provide an opportunity to learn about school age children by working in the classroom.

**Housing and Interior Design**

**Credit: 1**

**Prerequisite: 11-12**

Housing and Interior Design students explore factors affecting decisions related to housing and home furnishings for individuals and families. Planning, selecting, purchasing, and maintaining a livable home environment are emphasized, while exploring topics such as housing design, interior design, selection and use of appliances, energy conservation in the home, furniture selection and arrangement, wall and floor coverings, window treatments, accessories, and lighting.

**Family Life**

**Credit: 1**

**Prerequisite: Child Development with a C or better**

Family Life focuses on several topics affecting families in the 21st century.  Students will have the opportunity to explore and discuss a wide variety of topics such as interpersonal relationships, parenting, balancing work and family responsibilities, adapting to life cycle changes and coping with different family crises.  Students will also look more in-depth into parenting and the decisions needed to be effective and responsible parents.

**Adult Living Skills**

**Credit: 1**

**Prerequisite: 11-12**

Adult Living Skills is designed to help prepare students for living on their own after high school. Students develop decision-making skills as they relate to food selection and preparation, clothing selection and care, housing alternatives, and personal financial planning. The intent is to help students understand both the immediate and long-range consequences of the decisions they will be making.

**FCS Flow Chart**

**FOREIGN LANGUAGE**

**German I**

**Credit: 2**

**Prerequisite: None**

Urbandale Community School District’s Foreign Language German I course introduces students to the German language and culture. Major emphasis is placed on understanding the spoken work and conversational skills. Reading and writing basic conversational German are secondary goals. Subject matter deals with everyday topics such as school, family, friends, leisure time, meals, etc.

**German II**

**Credit: 2**

**Prerequisite: German I**

German II emphasizes vocabulary expansion and continued development of the structure of the language. Of particular importance is the use of new vocabulary and grammatical constructions of speaking, listening, reading, and writing. A look at present-day Germany through video tapes, filmstrips, and slides is presented.

**German III**

**Credit: 2**

**Prerequisite: German I & II**

German III offers a balanced program of conversation, listening, composition, grammar, vocabulary, and culture. Students review German II materials as needed and explore new areas of the language and culture.

**German IV**

**Credit: 2**

**Prerequisite: German III**

German IV stresses the use of the language through reading, listening, speaking and writing. Literature and cultural studies are used as conversational topics. Most writing is of a creative nature.

**German Experience Abroad**

**Course Length: Spring semester and summer**

**Credit: 1**

**Course Begins: Spring in even-numbered years**

**Co-requisite: Enrollment in German**

Urbandale's German Experience Abroad is organized under the auspices of the German-American Partnership Program (GAPP). The program consists of approximately four weeks during summer vacation at our partner school in Germany, preceded by weekly preparation during the prior semester.

Course work includes preparation of a personal scrapbook to share with the German host family, preparation and presentation in Germany of a report about life in the United States, completion of an activity booklet while in Germany and development and completion of a project related to life in Germany.

Participants are expected to continue with German the following fall and to host a student from our partner school.

**Japanese I**

**Credit: 2**

**Prerequisite: None**

Japanese I introduces students to the Japanese language and culture. Major emphasis is placed on understanding the spoken word and conversational skills. Reading and writing are secondary skills. Current events and career information are included on a regular basis. Subject matter deals with everyday topics such as school, family, friends, leisure time, meals, etc. The Japanese language is used as much as possible by students and teacher. Audio and visual tapes help bring authentic language experiences to the classroom.

**Japanese II**

**Credit:** 2

**Prerequisite: Japanese I**

Japanese II emphasizes vocabulary expansion and continued development of the structure of the language. Self-expression and listening skills are strengthened through question-answer drills, informal conversation, dialogues, and speeches. Reading and writing skills receive more attention than in first year Japanese. Current events, culture, and career information continue to be integral parts of the curriculum. Japanese is spoken as much as possible by teacher and students.

**Modern Japanese**

**Credit: 1**

**Prerequisite: Japanese II**

In Modern Japanese students will review and expand language skills in conversation, listening, composition, grammar, vocabulary, and reading abilities while examining a variety of current events and topics of interest in Japan today.

**Formal Japanese**

**Credit: 1**

**Prerequisite: Japanese II**

In Formal Japanese students will review and expand language skills in conversation, listening, composition, grammar, vocabulary, and reading abilities as used in formal settings and contexts such as letters, interviews, business meetings and phone calls, and speeches. This course will include a look at career options using Japanese language.

**Traditional Japanese**

**Credit: 1**

**Prerequisite: Japanese II**

In Traditional Japanese, students will review and expand language skills in conversation, listening, composition, grammar, and reading abilities while examining a variety of traditional Japanese practices, products, and perspectives.

**Advanced Japanese**

**Credit: 1 UHS + 4 DMACC**

**Prerequisite: 7 semesters of Japanese**

Advanced Japanese concentrates on conversational skills and composition as well as the reading of authentic materials. Literature, current events, and cultural studies are used as conversational topics. Successful students will speak only Japanese during class. **Advanced Japanese corresponds to FLJ 241 in the DMACC course guide.**

**Spanish I**

**Credit: 2**

**Prerequisite: None**

Spanish I introduces students to the Spanish language and Hispanic culture. Major emphasis is placed on understanding the spoken word and conversational skills. Reading and writing are secondary goals. Subject matter deals with everyday topics such as school, family, friends, leisure time, meals, etc. A brief overview of various Hispanic countries, artists, traditions and holidays is included.

**Spanish II**

**Credit: 2**

**Prerequisite: Spanish I**

Spanish II emphasizes vocabulary expansion and continued development of the structure of the language. Self-expression is strengthened through question-answer drills, informal conversation, and speeches. The culture of Latin America, Spanish, and Mexican influences on the United States and the vocational possibilities of Spanish are discussed.

**Spanish III**

**Credit: 2**

**Prerequisite: Spanish II**

Spanish III offers a balanced program of conversation, listening, composition, grammar, vocabulary, reading, and culture. Students review prior levels materials as needed and explore new areas. Third year examines the art, music, history, and geography of Spain and Mexico, as well as the Spanish way of life and philosophy.

**Spanish IV**

**Credit: 2**

**Prerequisite: Spanish III**

Spanish IV concentrates on conversational skills and composition. Literature, current events, and cultural studies are used as conversational topics. Writing activities include personal diaries and current event journals. Fourth year focuses on the art music, history, and culture of Mexico.

**Spanish V**

**Credit: 2**

**Prerequisite: Spanish IV**

Spanish V is available for students who have begun their Spanish studies in other districts. Curriculum is designed to meet the needs of the individual student.

**Adv Spanish III**

**Credit: 1 UHS + 5 DMACC**

**Prerequisite: Spanish I & 2, and DMACC enrollment criteria**

Advanced Spanish III 151 - Urbandale Community School District’s Foreign Language Advanced Spanish III course offers a balanced program of conversation, listening, composition, grammar, vocabulary, reading, and culture. Students review prior levels materials as needed and explore new areas. Third year examines the art, music, history, and geography of Spain and Latin America, as well as the Spanish way of life and philosophy. The language learned is based on themes of everyday life. Student speech will be modeled by instructors who will monitor and correct pronunciation and accent. Students will be asked to engage in simple conversations on a controlled basis using the themes presented in the curriculum. Much class time is spent practicing speech. Students will also be expected to use software available with texts to hone listening and speaking skills. **Advanced Spanish III corresponds to FLS 151 in the DMACC course guide.**

**Adv Spanish III**

**Credit: 1 UHS + 5 DMACC**

**Prerequisite: Spanish I, II, & Adv Spanish III**

Urbandale Community School District’s Foreign Language Advanced Spanish III 152 course offers a balanced program of conversation, listening, composition, grammar, vocabulary, reading, and culture. Students review prior levels materials as needed and explore new areas. Third year examines the art, music, history, and geography of Spain and Latin America, as well as the Spanish way of life and philosophy. Emphasis is on the understanding and production of oral and written Spanish presented in culturally appropriate settings. The language learned is based on themes of everyday life. Students will be asked to engage in more complex conversations using the themes presented in the curriculum. Speech will be monitored for pronunciation and accent and much class time is devoted to practicing speech. Students will also be expected to use available technology practice listening and speaking skills. **Advanced Spanish III corresponds to FLS 152 in the DMACC course guide.**

**Adv Spanish IV**

**Credit: 1 UHS + 4 DMACC**

**Prerequisite: Adv Spanish III**

Advanced Spanish IV Urbandale Community School District’s Foreign Language Advanced Spanish IV course is designed for fourth year students who want more challenging work than that provided by the regular curriculum. The primary goal of this course is a comprehensive review of the Spanish grammar introduced in Elementary Spanish with the goal of achieving a real working knowledge of this grammar in writing and speech. Comprehensible input now includes short readings in Spanish literature, newspapers, film, web sites or other print or visual media. While serving to increase vocabulary and knowledge of grammar, these also serve as a source of cultural information. **Adv Spanish IV corresponds to FLS 241 in the DMACC course guide.**

**Adv Spanish IV**

**Credit: 1 UHS + 4 DMACC**

**Prerequisite: Adv Spanish IV**

Advanced Spanish IV Urbandale Community School District’s Foreign Language Advanced Spanish IV course is designed for fourth year students who want more challenging work than that provided by the regular curriculum. Having studied most of the grammar in previous courses, time will be spent reviewing the more difficult and troublesome concepts including a continuation of the study of the subjunctive mood. Comprehensible input now includes more extensive readings in Spanish literature, newspapers, web sites, or other print as well as visual media. While serving to increase vocabulary and knowledge of grammar, they also serve as a source of cultural information. **Adv Spanish IV 242 corresponds to the FLS 242 in the DMACC course guide.**

**INTERDISCIPLINARY/**

**INTEGRATED**

**Academic Decathlon**

**Credit: .5 or 1**

**Prerequisite: Junior or Senior status**

Members of the Academic Decathlon team represent Urbandale High School in a variety of academic competitions throughout the year. The National Academic Decathlon curriculum is used as the basis of classroom activities. Students work in the areas of mathematics, social studies, science, fine arts, language and literature, economics, formal speech, impromptu speech, interview, and essay. This course may be taken more than once.

**Daily Living Skills**

**Credit: 1**

**Prerequisite: Teacher approval**

Daily Living Skills is designed to provide living skills to prepare the student for postsecondary transition. The emphasis of this course includes personal safety, community leisure and participation skills, money management, household management, career exploration, personal health needs, and employability and work skills.

**Cultural Issues**

**Credit: 1**

**Prerequisite: 11-12 grade or extensive knowledge of another culture. Required of exchange students.**

This class simulates the sounds, sights, activities, and values of the cultures studied so that students will come as close as possible to experiencing them. Field trips, guest speakers, hands-on activities, food, reflections and discussion are regular features of the class. Students will be able to approach new cultures with comfort and sensitivity as a result of the experiences provided during this course.

**Drama**

 **Credit: 1**

The purpose of this semester long course is to extend student experience with theater allowing for deeper exploration into theart of production. Thestudent will be asked to develop his or her ability to create theater through artistic collaboration with fellow students and the instructor. Theatre History, culture and technology will dictate the individualized goals of each student. Through creating productions for both presentation in class as well as live performance, the student will grow in his or her ability to recognize the value of performing arts and the process of working as a member of a production team.

**English as a Second Language**

**Credit: 2**

**Prerequisite: Teacher Approval**

This course teaches English to those who speak other languages. The emphasis is on developing communicative competence in the target language in reading, writing, listening, and speaking, through regular assignments as well as content-based instruction and support for curricular course work. The ELL program promotes a positive learning environment in which students learn how to be successful in the general classroom educational setting.

**English as a Second Language - Resource**

**Credit: 0**

**Prerequisite: Teacher Approval**

This course is aimed at those students developing proficiency in English who have a working knowledge of English and who want to continue improving their English skills. The emphasis is on developing academic language through content-based instruction and support for curricular course work.

**Journalism 1**

**Credit: 1**

**Prerequisite: Composition or Teacher recommendation for sophomores**

Journalism 1 is designed to give the student an insight into the differences that exist between the journalism writing process and the processes of other forms of writing. The students are given the opportunity to develop journalism appreciation and journalism skills through the guided practice of interviewing, writing, and copy editing. Also emphasized is the exploration into the ethics of journalism and developing skills needed for the production of a high school publication.

**Journalism 2, 3, 4**

**Credit: 1**

**Prerequisite: Journalism 1 with a B or better**

Journalism II is designed to give the student the opportunity to apply the skills gained in Journalism I. Students in Journalism II are responsible for writing, editing, and publishing the school newspaper. Students are responsible for planning each issue, writing and typing the copy, editing and proofing the stories, shooting the photos, and designing the layouts.

**RECESS**

**Credit: 1**

**Prerequisite: Student Study Team approval**

RECESS (Remediation, Career Exploration, Student Support) is an educational opportunity that provides additional support to help students develop positive self-concepts and find academic success. Some needs that permit a student to be considered for RECESS include attendance difficulties, credit deficiencies, delayed graduation, low grades, or personal/family concerns that interfere with school success. Students will be enrolled in a Life skills class to develop personal and social responsibility and to build positive relationships. Study skills support will be provided for the students during study time and students will be given an opportunity to explore and develop career interests.

**Resource**

 **Credit: 0 or 1**

**Prerequisite: Teacher approval**

Each student will work toward strengthening basic academic skill areas. Credit is determined by the amount of time a student does skill building work versus tutorial assistance.

**Service Learning**

**Credit: 2 (2-period block)**

**Grade Level: 9-10**

**Prerequisite: Teacher/ Student Study Team approval**

Students participating in Service Learning will take part in a meaningful learning experience through community service activities. Students will participate in a variety of service learning projects to enhance self-esteem, citizenship, work ethic, academic growth, and work skills.

**Extended Learning Program**

**Credit: 2**

**Prerequisite: Teacher approval**

The Extended Learning Program course is designed to be an extension of the various general education courses offered at Urbandale High School. At varying points in students’ academic careers they may desire to study an academic subject area further than the designed course curriculum allows. In addition, this integrated (individually designed) course offers students an opportunity to explore and develop career interests and meet cognitive and affective needs. Students will create an individual plan for the project(s) to be completed in the course according to the student’s Personalized Education Plan (PEP) goal(s).

**Yearbook**

**Credit: 2**

**Grade Level: 11, 12**

**Prerequisite: Computer Apps 1**

Yearbook is an exciting, challenging and fun class. Throughout the class students will learn about page layout and design, publishing, journalism, photography, and business/sales skills. Being a member of the staff is an awesome responsibility, but by the end of the year, you have produced a book that is valued by students, faculty and community. Topics include journalism basics, ethics, law, copy writing, captions, headlines, design, Photoshop, photography basics, organization of staff, yearbook terminology and ad preparation and sales.

**Student TEAMS**

 **Credit 1**

 **Prerequisites None**

Designed to train students and learners of any organization in continuous improvement methodologies, Langford Student TEAMS (Training, Evaluating, Analyzing, and Measuring Systems) training is an independent workshop that follows the quality improvement philosophy and structure. Students are provided the opportunity to develop communication skills, explore natural leadership situations, learn quality improvement tools, develop a purpose, understand and follow a vision, and apply problem-solving skills to improve the quality of their own learning. It is a step to building long-term profound changes in lifelong learning practices and the improvement of work and learning processes.

Students gather and analyze data regarding a problem, present their findings, and propose a plan for reducing or eliminating the problem by following the PDSA (Plan-Do-Study-Act) cycle. They will learn:

* + Systems Thinking
	+ Problem-Solving Using PDSA
	+ Portfolio Development and Organization
	+ Learning Process Documentation
	+ Data Collection and Analysis
	+ How to Study Variation and Its Effect on a System

 How to Build and Strengthen Communication Network

**MATHEMATICS**

**Basic Math**

**Credit: 2**

**Prerequisite: Teacher approval**

Basic Math is designed to meet the unique needs of students who are just developing their basic arithmetic computation skills.

**General Math**

**Credit: 2**

**Prerequisite: Teacher approval**

General Math is designed to develop and improve a student’s arithmetic computation skills. An attempt is made to introduce students to everyday situations in which they will use these skills. A secondary purpose is to prepare some of the students for Algebra 1A

**Consumer Math I**

**Credit: 1**

**Prerequisite: Junior or Senior with 1 year of math credit**

Consumer Math I is designed to develop and sharpen arithmetic skills through an exposure to the wide range of everyday uses for mathematics. This course is also designed to provide pertinent information that students will utilize in everyday living situations.

**Consumer Math II**

**Credit: 1**

**Prerequisite: Junior or Senior with 1 year of math credit**

Consumer Math II is designed to develop and sharpen arithmetic skills through an exposure to the wide range of everyday uses for mathematics. This course is also designed to provide pertinent information that students will utilize in everyday living situations. Consumer Math I is not a prerequisite.

**Algebra I**

 **Credit: 2**

**Prerequisite: None**

Algebra I provides the opportunities for students to develop mathematical concepts in a variety of applications. The emphasis is on the use of algebraic equations to model real data and solve problems. Algebra I provides the means of operating with concepts at an abstract level and then applying them. It gives students the opportunities to represent situations that involve variable quantities with expressions, equations, inequalities, and matrices; use tables and graphs; and solve equations and inequalities. Students successful in Algebra I are able to use statistics, graphing techniques, technology, and estimation to describe the world around them. Students are able to solve equations and inequalities, simplify algebraic expressions, and apply various problem-solving skills. Students in Algebra I integrate reading, writing, speaking, listening, and cooperative learning skills in order to expand their knowledge and apply it to real-life situations.

**Honors Algebra II and Trigonometry**

**Credit: 2**

**Prerequisite: B+ in all semesters of Algebra I and Geometry or Instructor Approval**

Honors Algebra II and Trigonometry combines both the Algebra II and Trigonometry classes into an accelerated mathematics course.

**Algebra I A**

**Credit: 2**

**Prerequisite: Teacher Approval**

Algebra I A is the first year of the two year course sequence of Algebra I A and B. This course is designed for students who want to take algebra but find the abstract concepts difficult to grasp and need additional time to refine skills and build confidence. Algebra I A allows students to cover the same curriculum as students in first semester Algebra 1. Students will be able to spend more time on each concept and will have more time to practice and demonstrate skills that will develop and internalize the abstract concepts presented in algebra.

**Algebra I B**

**Credit: 2**

**Prerequisite: 1 Algebra I credit or 2 Algebra A credits or teacher approval**

Algebra I B is the second year of the two-year course sequence of Algebra I A and B. This course is designed for students who want to take algebra but find it hard the abstract concepts difficult to grasp and need additional time to refine skills and build confidence. Algebra I B allows students to cover the same curriculum as students in second semester Algebra I. Students will be able to spend more time on each concept and will have more time to practice and demonstrate skills that will develop and internalize the abstract concepts presented in algebra.

**Geometry**

**Credit: 2**

**Prerequisite: Algebra I or IA IB credits or teacher approval**

Geometry is designed to provide insight into the properties of geometry and mathematical proofs, which will provide a good foundation for students who may want to take advanced courses. Most of the work is with two dimensional figures with the idea that students can transfer these properties to their three dimensional world.

**Algebra II**

**Credit: 2**

**Prerequisite: 2 Geometry credits or teacher approval**

Algebra II enhances the problem-solving process started in Algebra I by continuing to develop the basic and advanced properties of functions and algebra. Algebra II gives students the opportunity to model real data by understanding and applying the algebraic concepts of equations and inequalities, basic relations and functions, polynomials, matrices, conics, and exponential functions. Students in Algebra II are able to describe the world around them by utilizing estimation, technology, graphing techniques, and statistics. Algebra II is designed to meet part of the three-year entrance requirements for mathematics to most colleges. Algebra II provides a valuable background for those entering technical fields and also serves as a useful course for other college-bound students.

**Trigonometry**

**Credit: 1**

**Prerequisite: 2 Geometry credits or teacher approval**

Trigonometry is the study of triangle measurement and the unit circle. Many real-world problems (e.g., navigation and surveying) require the utilization of triangles in their solutions. Trigonometry also provides an important mathematical connection between geometry and algebra.

**Probability and Statistics**

**Credit: 1**

**Prerequisite: 2 Algebra II and Trigonometry Credits or Honors Algebra II credits or teacher approval**

Probability provides a framework for dealing with uncertainty and for interpreting predictions based on uncertainty. Students will use probability to make informed observations about the likelihood of events and to interpret and judge the validity of statistical claims. Statistics is utilized for the collecting, representing, and processing of important data. Learning to apply these statistical techniques in solving problems, students will enhance their social awareness and career opportunities.

**Applications of Algebra**

**Credit: 2**

**Prerequisite: 11-12 grade, 2 Algebra II credits or 2 Honors Algebra II or teacher approval**

Applications of Algebra is a two-semester course designed to prepare students for further study of mathematics. The students review and continue to develop the properties and applications of algebraic, logarithmic, and trigonometric functions and are introduced to selected pre-calculus topics. This class provides a valuable background for those wishing to continue their study of mathematics.

\*Trigonometry must be completed before or taken concurrently with first semester Applications of Algebra.

**Pre-calculus**

**Credit: 2 UHS + 5 DMACC**

**Prerequisite: Trigonometry credit\*, 2 Algebra II credits, 2 Honors Algebra II or teacher**

 **Approval; Second Semester requires a qualifying ALEKS score**

Pre-Calculus is designed to prepare students for a course in calculus at the college level. This course is for students who intend to continue their education in mathematics, engineering, science, or other math-related areas, or who are interested in learning mathematics as a part of their total education. A secondary purpose is to provide students not planning a math-related career with the mathematics they need to pass-out of required math courses at the college level. **Pre-calculus corresponds to MAT 129 in the DMACC course guide**. To qualify for the 5 hours of DMACC credit, a student must complete the full year class (fall and spring semesters) and register in the second semester with DMACC.

\*Trigonometry must be completed before or taken concurrently with first semester Pre-calculus.

**AP Calculus AB**

**Credit: 2 UHS + 5 DMACC**

**Prerequisite: 2 Pre-Calculus credits or teacher approval**

AP Calculus is designed to provide a thorough introduction into differential and integral calculus. It is comparable to the first year calculus course taught at some colleges and universities. Students who enroll in the course have the goals of getting a preview of calculus before college and/or acquiring sufficient skills and knowledge of the subject to enter a college mathematics program level higher than beginning calculus.

The overall objective of the course is to prepare students for the advanced placement test in calculus. Most colleges and universities grant college credit for scoring well on this exam. **AP Calculus corresponds to MAT 211 in the DMACC** **course guide.**

**Life Skills-Math**

**Credit: 2**

**Prerequisite: Teacher approval**

Life Skills - Math is designed to develop and improve students’ math skills. Major emphasis will be placed on the areas of money, telling time, and basic math facts. Community outings will be utilized to reinforce these skills.

**MUSIC**

**Band**

**Credit: 1**

**Prerequisite: Successful completion of 8th grade band and completion of the Advanced Beginner level of the Individual Developmental Performance Record, or pre-approval of director**

This course is a performance-based class, giving approximately 15-20 performances each school year. Band meets every day. Two substantial units of study will take place throughout the year: 1. Marching band 2.) Conference Band. During quarter one, all students enrolled in band will study marching band. During quarter two, three, and four, all students will be placed by ability in either band (for intermediate students), the Wind Ensemble (for proficient students), or Wind Symphony (for advanced students). All groups will perform at many concerts within the school district and contests around the state.

**Jazz Band**

**Credit: 1**

**Prerequisite: Audition**

High School Jazz Band is a course offered to those students who are currently enrolled in the large group bands which encompass both marching band and concert band consecutively. This class will provide students the opportunity to learn about jazz literature, jazz history, jazz pedagogy, jazz improvisation, and jazz theory. The students in this class will comprise a jazz band, more than one if necessary, which will perform at a variety of venues in concerts, contests and festivals. Involvement in Jazz Band will foster individual responsibility, accountability, self-discipline, teamwork, and dedication towards excellence. Knowledge and skills attained at this level will serve to prepare the student for further musical involvement not only in this idiom, but in other musical endeavors as well. Group literature levels range from level 3 to 5 on a scale of 1 to 6.

**Men’s Concert Choir**

**Credit: 1**

**Prerequisite: Boys 9-12**

Men’s Concert Choir is a large choir open to all boys. No audition is required. This class emphasizes healthy singing technique and basic music literacy. Concert Choir performs a wide variety of choral repertoire in multiple concerts throughout the school year. The group meets every day. Voice lessons are available to interested students.

**Treble Choir**

**Credit: 1**

**Prerequisite: 10-12 (Audition)**

Treble Choir is a large choir open to students with high pitched voices in grades 10-12. An audition with solo singing, sight-reading, and tonal memory components is required. This class emphasizes healthy singing technique and basic music literacy. Treble Choir performs a wide variety of choral repertoire in multiple concerts throughout the school year. The group meets every day. Voice lessons are available to interested students.

**Urbandale Singers**

**Credit: 1**

**Prerequisite: 10-12 (Audition with solo singing, sight reading, tonal memory, and essay/interview components is required.)**

Urbandale Singers is the premier UHS choral ensemble of students in grades 10-12. This class emphasizes healthy singing technique and advanced music literacy. Urbandale Singers performs a wide variety of choral repertoire in multiple concerts throughout the school year. The group meets every day. Voice lessons with a private teacher or UHS instructor (offered at no cost to the student) are required.

**Women’s Concert Choir**

**Credit: 1**

**Prerequisite: Girls 9-12**

Women’s Concert Choir is a large choir open to all girls in grades 9-12. No audition is required. This class emphasizes healthy singing technique and basic music literacy. Women’s Concert Choir performs a wide variety of choral repertoire in multiple concepts throughout the school year. The group meets every day. Voice lessons are available to interested students.

**ONLINE AP CLASSES**

***Students must be signed up by the end of***

***the previous school year.***

**Online AP Chemistry**

**Credit: 2**

**Prerequisite: Chem/College Chem and Algebra II or Honors Algebra II**

AP Chemistry builds students' understanding of the nature and reactivity of matter. After studying the structure of atoms, molecules, and ions, students move on to solve quantitative chemical problems and explore how molecular structure related to chemical and physical properties. Students will examine the molecular composition of common substances and learn to predictably transform them through chemical reactions. The equivalent of an introductory college-level chemistry course, AP chemistry prepares students for the AP Exam and for further study in science, health sciences, or engineering.

**Online AP English Language and Composition**

**Credit: 2**

**Prerequisite: Min. of B in most recent English course**

In AP English Language and Composition, students learn to understand and analyze complex styles of writing by reading works from a variety of authors. They will explore the richness of language, including syntax, imitation, word choice, and tone. They'll also learn about their own composition style and process, starting with exploration, planning, and writing, and continuing through editing, peer review, rewriting, polishing, and applying what they learn to a breadth of academic, personal, and professional contexts. The equivalent of an introductory college-level survey class, this course prepares students for the AP Exam and for further study in communications, creative writing, journalism, literature, and composition.

**Online AP Physics**

**Credit: 2**

**Prerequisite: Algebra II or Honors Algebra II and College Physics**

AP physics B is a non-calculus survey course covering five general areas: Newtonian mechanics, thermal physics, electricity and magnetism, waves and optics, and atomic and nuclear physics. Students will gain an understanding of core physics principles and then apply them to problem-solving exercises. Students will learn how to measure the mass of a planet without weighing it, find out how electricity makes a motor turn, and learn how opticians know how to shape the lenses for glasses. The equivalent of an introductory college-level course, AP Physics B prepares students for the AP exam and for further study in science and engineering.

**Online AP Statistics**

**Credit: 2**

**Prerequisite: Algebra II or Honors Algebra II**

AP Statistics gives students hands-on experience collecting, analyzing, graphing, and interpreting real-world data. They learn to effectively design and analyze research studies by reviewing and evaluation real research examples taken from daily life. The next time they hear the results from another poll or study, they'll know whether the results are valid. As the art of drawing conclusions from imperfect data and the science of real world uncertainties, statistics plays an important role in many fields. The equivalent of an introductory college-level course, AP statistics prepares students for the AP Exam and for further study in science, sociology, medicine, engineering, political science, geography, and business.

**Online AP Macroeconomics**

**Credit: 2**

**Prerequisite: Algebra II or Honors Algebra II**

AP Macroeconomics students learn why and how the world economy can change from month to month, how to identify trends in our economy, and how to use those trends to develop performance measures and predictors of economic growth or decline. They’ll also examine how individuals, institutions, and influences affect people, and how those factors can impact everyone’s life through employment rates, government spending, inflation, taxes, and production. The equivalent of a 100-level college-level class, this course prepares students for the AP Exam and for further study in business, political science and history.

**Online AP Microeconomics**

**Credit: 2**

**Prerequisite: Algebra I**

AP Microeconomics studies the behavior of individuals and businesses as they exchange goods and services in the marketplace. Students will learn why the same product costs different amounts at different stores, in different cities, at different times. They’ll also learn to spot patterns in economic behavior and how to use those patterns to explain buyer and seller behavior under various conditions. Microeconomics studies the economic way of thinking, understanding the nature and function of markets, the role of scarcity and competition, the influence of factors such as interest rates on business decisions, and the role of government in promoting a healthy economy. The equivalent of a 100-level college course, AP Microeconomics prepares students for the AP Exam and for further study in business, history, and political science.

**PHYSICAL EDUCATION**

**Physical Education 9-10**

**Credit: .25 per semester**

The objective of 9th/10th grade physical education is to provide students with a variety of activities that include sportsmanship, health/fitness knowledge and skill development.

Students will select an area of focus within 9th and 10th grade. Areas include Fitness, Team Sports, Recreational Activities, and Strength Training, All sections will integrate the State required components of physical fitness activities that increase cardiovascular endurance, muscular strength and flexibility; sports and games; tumbling and gymnastics; rhythms and dance; water safety; leisure and lifetime activities. Fitness and Strength Training will introduce a variety of fitness programs such as aerobics and free weights. Team games sections will include activities such as basketball and volleyball. Recreational activities will include, but not be limited to, bocce ball and archery.

**Physical Education 11-12**

**Credit: .25 per semester**

The objective of 11/12th grade physical education is to provide students with a variety of activities that expand their experience in various physical activities.

Students will select an area of focus to continue to study and demonstrate the state required components of physical education. Students will further develop their skills in movement, participate regularly in physical activities and lifelong activities, comprehend and apply the concepts of fitness, develop social relationships and gain an understanding of their individual fitness level. This course includes the state requirement of cardiopulmonary resuscitation (CPR) training for all graduates.

**Health**

**Credit: 1**

The Health course is a one semester, state-mandated comprehensive course. Students are introduced to a spectrum of health-based topics. Areas of study include, but are not limited to the following: self-esteem & mental health, hygiene, anatomy, exercise, nutrition, substance abuse, family life, control & prevention of disease, consumer choices, first aid, death/dying, environmental concerns, and human growth & development. Guest speakers from State & government agencies that provide health resources are sometimes included. Interdisciplinary projects are a routine part of the health curriculum.

**Wellness for Life**

**Credit: 1**

**Grade Level: Grades 11-12**

The Wellness class continues the progression of health related information that has been taught in Health and PE classes. Areas of study include: stress management, body systems, health care systems, health related careers, dynamics of nutrition, body image, sexual harassment, CPR & first aid, fitness, international health, wellness programs, disabilities, infectious/non-infectious disease, mental disorders, self-esteem, and community health services. Wellness students have first-hand interactions with community health related professionals and the services they offer.

**Contract Physical Education**

**Credit: .25**

In extenuating circumstances, students in grades 9–12 may participate in programs other than the regular physical education instructional program and still receive credit to meet graduation requirements.

The student must submit a Contract Program proposal that gives a general outline of activities. Student must meet the following requirements:

* Students must have no physical education failures to make up from previous years.
* Students must have a full academic schedule: 1. The schedule must include band, chorus and foreign language to be considered a full schedule. 2. The schedule includes senior credit deficiency needs. 3. The schedule includes vocational program (such as DMACC or Central Campus).
* Students must participate in the activity 2.5 hours per week.
* Activities must include but not limited to:
1. Physical fitness activities that increase cardiovascular endurance.
2. Muscular strength and flexibility.
3. Sports and games.
4. Tumbling and gymnastics.
5. Rhythms and dance.
6. Water safety.
7. Leisure and lifetime activities
8. Water-Safety Instructor/Lifesaving
* Students must keep a log of the activity that includes amount of time spent on the activity each week. Logs can be found on the high school page of the website.
* Student and parent/guardian must meet with school administrator or staff designee. During the meeting students will submit their proposal explaining what activities they will participate in to successfully complete the contract. This must be done no later than one week prior to the start of the semester the student is contracting for. In order to be valid the contract must be signed by the student, a parent, the designated teacher, and an administrator all agreeing to its terms.
* Student must meet the CPR certification requirement for graduation.
* Students will receive a letter grade based on participation and documentation. For every week the participation and documentation requirements are not met, the student’s grade will be lowered one whole grade.

**Contract PE: Lifesaving**

**Credit: 1**

**Grade Level: Grades 9-12**

Lifesaving is a contract PE option offered during 8th period. Students will attend lifesaving at the Urbandale Pool. Parent/guardian permission is required. Students must maintain an activity log.

**SCIENCE**

**Earth and Space Science (Pending board approval)**

**Credit: 2**

**Prerequisite: Preference to 9th and 10th graders**

Earth & Space Science introduces students to the two fields of geology and astronomy and prepares them for more advanced science courses. Earth & Space Science is two semester inquiry based course. The topics include but are not limited to: earth's place in the universe (stars, nuclear fusion, big bang theory, celestial composition), earth's systems (plate tectonics, thermal convection, climate), and earth and human activity (natural resources, natural hazards, mineral & energy resources).

**Physical Science (Pending board approval)**

**Credit: 2**

**Prerequisite: Preference to 9th and 10th graders, Concurrent enrollment in Algebra IA or higher:   Recommended for students who plan to take Chemistry.**

Physical Science introduces the students to the physical world and prepares them for more advanced science courses. Physical Science is a two semester inquiry based course. The course will focus on the modern concepts of chemistry & physics. The topics include but are not limited to: dimensional analysis, matter, periodic table, chemical reactions, chemical bonds, reaction rates, motion, Newton's laws, electricity, magnetism, and energy transfer.

**Biology**

**Credit: 2**

**Prerequisite: Preference to 9th and 10th graders**

Biology is a survey of many different aspects of living things. It will cover topics ranging from microscopic to populations of organisms. The course will provide a strong background in the basic biological language.

**College AP Biology**

**Credit: 2 + 8 DMACC**

**Prerequisite: Successfully completed Chemistry or Physical Science or currently enrolled in Chemistry**

 **11-12 grade or teacher approval**

College AP Biology will cover a full range of biology concepts from microbiology to macro-biology. This is a college level biology course.  A fundamental understanding of chemistry concepts is important to a student's success in this class. First semester will focus on microbiology, such as biochemistry, cell biology, biochemical pathways, genetics, and heredity.  Second semester will emphasize macro-biology, such as evolution, taxonomy and classification of species, and the structure and physiology of plants and animals. **Qualifies for DMACC credit BIO 112 and BIO 113.**

**Environmental Science**

**Credit: 2**

**Prerequisite: 11-12 or teacher approval and 2 years of science, including Biology**

In environmental science we will provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them. Some topics investigated include Earth systems and resources, the living world, population, land and water use, energy resources and consumption, pollution, and global change.

**AP Environmental Science**

 **Credit: 2**

 **Prerequisite: 11-12 grade and Biology and either Chemistry or College Chemistry**

The AP Environmental Science course is designed to be the equivalent of a one-semester, introductory college course in environmental science, through which students engage with the scientific principles, concepts and methodologies required to understand the interrelationships of the natural world. The course requires that students identify and analyze natural and human made environmental problems, evaluate the risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography.

**Chemistry**

 **Credit: 2**

**Prerequisite: C or better in both semesters of Algebra or Algebra 1A & 1B. Students are encouraged to take Physical Science before taking Chemistry.**

 **11-12 grade or teacher approval**

This two-semester course is designed to meet the needs of the student who wants to go on to a 4 year university. The course will focus on the modern concepts of chemistry and on using problem solving effectively. Some topics investigated include atomic structure, periodic law, chemical bonds, chemical composition, chemical equations, gas laws, solution process, acid and bases, and science/society issues pertaining to chemistry. A student must pass the 1st semester to enroll in the 2nd semester.

**College Chemistry**

**Credit: 2 + 4 DMACC**

**Prerequisite: B+ or better in both semesters of Algebra or Algebra 1A & AB**

 **11-12 grade or teacher approval**

College Chemistry is a two-semester course with an emphasis on laboratory work. It is designed for students who might be considering majoring in a science field. Some topics investigated include atomic structure, electron configuration of the atom, the periodic table and periodic trends, chemical bonds, chemical composition, chemical reactions and equations, gas laws, solutions, acids and bases, thermodynamics, and a brief introduction to organic chemistry. A student must pass the 1st semester to enroll in the 2nd semester, and must pass both semesters to earn college credit.   **College Chemistry corresponds to CHM165 in DMACC’s course guide.**

**College Physics**

**Credit: 2 + 5 DMACC**

**Prerequisite: B or better in Chemistry and Trigonometry**

 **11-12 grade or teacher approval**

College Physics is an advanced two-semester science course that is taught by experimentation in the lab. Topics include the study of force, rectilinear motion, curvilinear motion, work, power, energy, wave motion, sound, light, optics, interference and diffraction. Computer science skills are taught using VBA in Excel to create physics applications. Mechanical engineering is taught creating projects each quarter culminating in a miniature roller coaster that will be entered into competition at Iowa State University in the spring. **Physics corresponds to PHY160 in DMACC’s course guide.**

**Human Anatomy and Physiology**

**Credit: 2**

**Prerequisite: 2 years of science including Biology and Health**

 **11-12 grade or teacher approval**

Human Anatomy and Physiology is a yearlong course taught to prepare students for college level medical and/or anatomy courses. During this class, students will study the structure and function of the body systems systemically. Students will start the class by reviewing basic biology knowledge, as well as learning important vocabulary and terminology used by the scientific community. A fundamental understanding of chemistry concepts is important to a student's success in this class. The following body systems will be taught during first semester: integumentary, skeletal, muscular, and nervous systems. Second semester will focus on the study of the endocrine, circulatory, respiratory, digestive, urinary, and immune body systems.

**Principles of Engineering: Applied Physics**

**Credit: 2 + 3 DMACC**

**Prerequisite: Completion of Intro to Engineering Design (IED) prior to taking POE**

**Completion of Trigonometry by the end of the first semester of POE or concurrently enrolled in Advanced Algebra II**

**Grade: 11-12 or Science Department approval**

POE is a course that helps students understand the fields of engineering and physics. Exploring various technology systems and manufacturing processes help students learn how engineers use math, science and technology in an engineering solving process to benefit people. The course is heavily project-based and includes machine control through computer programming. Students should have a strong math background and show an interest in the STEM fields. This course is an applied physics course and is worth 2 high school science credits. **This course also corresponds to EGT410 in the DMACC course guide**.

**Life Skills – Science**

**Credit: 2**

**Prerequisite: Teacher approval**

Life Skills – Science allows students to explore a variety of science topics. It is designed to allow students to investigate using the process of scientific inquiry. Skills will correlate with life skills needed during their high school career as well as with their post-secondary transition. Students will utilize these skills in a variety of ways.

**Science Flow Chart**

**SOCIAL STUDIES**

**Cultural Geography**

**Credit: 2**

**Grade Level: 9**

This course introduces students to the connections between the physical geography of a place and how it influences the culture of the people that live there. The curriculum covers the major methods and theories that are used in attempting to explain the world that human beings have created.

**AP Human Geography**

**Credit: 2**

**Recommended Prerequisite: 8th Grade Social Studies**

AP Human Geography is a two-semester course designed as an introductory college geography class. This course introduces students to the basic concepts of human geography and provides a geographic framework for the analysis of current world problems. The course introduces students to the systematic study of patterns and processes that have helped shape human understanding, as well as the use and alteration of the Earth’s surface. The course develops the ability to ask geographic questions, to acquire organize, and analyze geographic information, and finally answer various geographic questions. Students employ spatial concepts and landscape analysis human social organization and its environmental consequences.

**World Issues**

**Credit: 1**

World Issues is deigned to acquaint the student with a wide range of current worldwide and national issues. Important issues or events in the world will be traced to their historical roots. This course is designed to assist students in becoming more informed world-citizens and to give them the historical background of events necessary to better understand current situations. Students will become familiar with important people, places and events in the world and will be able to hold opinions based on facts and deeper understandings.

**American History**

**Credit: 2**

**Grade Level: 11**

American History is a two semester course required for graduation. In this class, students are asked to examine movements in America, both past and present, which have shaped the American point of view. Students will study periods of American History from post Reconstruction (1877) to present day.

**World History: Ancient**

**Credit: 1**

**Grade Level: 10-12**

World History focuses on the development of civilization from earliest man. Emphasis is placed on human achievement from the Neolithic Period through the Middle Ages. Special emphasis is placed on the arts and sciences and the lasting contributions to Western Civilization made by the major groups studied. The role of the individual in history is stressed. Comparisons are drawn between ancient times and modern where applicable. The student should gain an understanding of their cultural heritage and an appreciation for the contributions made by individuals who lived in ancient times.

**European World History: Renaissance to Present**

**Credit: 1**

**Grade Level: 10-12**

European World History focuses on the political development of modern European nations from 1600 to present. Special emphasis is placed on political and social movements, which include nationalism, imperialism, industrialism, and the effects of war. The students should gain an understanding of the complexity of the modern world and an appreciation for the antecedents of current issues and conflicts.

**AP European History**

**Credit: 2**

**Recommended Prerequisite: Cultural Geography or AP Human Geography**

**Grade Level: 10-12**

AP European History focuses on an in-depth study of the history of Europe from 1500 to present. The topics emphasized will include Renaissance and Exploration, Reformation and Religious Wars, Early Modern Society, Scientific Revolution, Growth of the State and Commercial Revolution, Enlightenment and Social Change, French Revolution, Industrial Society, nationalism and Imperialism, Intellectual, Cultural, and Social Upheaval, world War I and Revolution, The Crisis of Democracy, and World War II, and 1945 to present. Emphasis will be placed on themes that run throughout history. Essay writing will be an important component of the course as well as document based questions (DBQs) and multiple choice quizzes and exams. These are designed to replicate components of the College Board exam to prepare students to take the AP European History Test.

**AP US History**

**Credit: 2**

**Recommended Prerequisite: Cultural Geography or AP Human Geography or World History or AP American History**

**Grade Level: 11**

AP US History is designed for students who wish to successfully complete the advanced placement exam administered by the College Board Advanced Placement program. Most colleges and universities grant college credit for scoring well on this exam. This course is taught chronologically with unit emphasis as follows: The years 1607 to 1789; 1790 to 1916; 1917 to the present. The course will emphasize both knowledge on a factual basis and the ability to develop concepts. Political, social, diplomatic and economic history will be emphasized. Historiography will be a part of the study within each unit. The student will be expected to use a textbook, other secondary and primary source material and take notes from lecture. Essay writing will be an important component of the course as well as document based questions (DBQs) and multiple choice quizzes and exams. These are designed to replicate components of the College Board exam that is given in May. This exam is not required but the student is encouraged to consider taking it.

**American Government**

**Credit: 1**

**Grade Level: 12**

American Government is a one semester course required for graduation. Students study a basic overview of the historical development, political process, and the three branches of government. The focus is the national government with additional information on state and local.

**AP US Government/Economics**

 **Credit: 2**

 **Recommended Prerequisite: American History or AP American History**This course will meet both the government and economics requirements for graduation and also prepare the student to take the AP government and politics exam, integrating it with the basic principles of economics. Students will learn the basic principles of a market economy and the role of supply and demand, and price determination. It will also include the role of the government in our economic system. Students will become familiar with the various institutions, groups, beliefs, and ideas that constitute U.S. politics. Students will view current issues in American society from a political and economic point of view.

**Economics**

**Credit: 1**

**Grade Level: 12**

Economics class provides an introduction to the basic principles of macroeconomics and microeconomics. These theories are emphasized and highlighted in relation to the U.S. economy. Additionally, international finance is studied with respect of how the U.S. fits globally into world economies. Lastly, personal finance topics such as, but not limited to, savings and investing, insurance, and taxes are emphasized in order to help students prepare for their next step in life.

**Non-Western History**

**Credit: 1**

**Grade Level: 10-12**

Non-Western History focuses on Asian and Middle East Civilizations including China, India, Mesopotamia, Indus Valley, and the Middle East. Emphasis will be on the changing nature of societies through the perspective of political, social, and economic factors.

**Psychology**

**Credit: 1**

**Prerequisite: 11-12**

A general survey of the important concepts in psychology with traditional theories and modern developments. It includes, but is not limited to, such topics as the history of psychology, the biological foundations of behavior, learning, memory, problem solving, sensation and perception, states of consciousness, motivation, emotions, personality, intelligence, gender, and sexuality and abnormal behavior.

**AP Psychology**

**Credit: 2**

**Recommended Prerequisite: :Cultural Geograhy or AP Human Geography or World History or AP European History**

The Advanced Placement Psychology course is designed for students who wish to complete studies equivalent to an introductory college course in Psychology. The purpose of the course is to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and selected animals. Major topics in the course include: history and approaches, biological bases of behavior, sensation and perception, states of consciousness, learning, and cognitions.

**Sociology**

**Credit: 1**

**Prerequisite: 10-12**

Students explore the concepts and theories necessary to systematic understanding of our social worlds. Topics include considering sociology as science, the nature of large-and small-scale groups, social stratification, historical eras and social change, and race, ethnic and gender relations.

**Social Studies Flow Chart**

**STEM**

In an effort to promote education and careers in Science, Technology, Engineering and Mathematics (STEM) and increase the diversity of students in STEM classes at UHS, we have created this section in the course handbook devoted to STEM classwork.  Though most of these classes can be found elsewhere in the course handbook under their respective content areas, they are highlighted here to provide a clear pathway for all students interested in pursuing engineering and other STEM related fields.  As well, students can earn up to **36 college credits** through participation in these specific classes, many designed specifically to expose students to lucrative careers in STEM.

Annually one male and one female graduating senior will be recognized for their regular participation in STEM classes and their commitment to the growing field of STEM.

**Introduction to Engineering Design (IED)**

 **Credit:               2 + 3 DMACC**

**Prerequisite:                  Algebra 1, Recommended: Geometry**

Introduction to Engineering Design is a course that teaches problem solving skills using a design development process. Model solutions are created, analyzed, and communicated using solid modeling, computer design software. Students will be challenged with practical applications of math and science. Students should have a strong math background and show an interest in the STEM fields (Science, Math, Engineering and Technology). **Although highly recommended for serious science/math students the engineering courses cannot count for a science or math credit.** **This course does however correspond to EGT400 in the DMACC course guide.**

**Computer Science and Software Engineering (CSE)**

 **Credit:               2 + 3 DMACC**

**Prerequisite:                   C or better in both semesters of Algebra I**

Using Python® as a primary tool and incorporating multiple platforms and languages for computation, this course aims to develop computational thinking, generate excitement about career paths that utilize computing, and introduce professional tools that foster creativity and collaboration. CSE helps students develop programming expertise and explore the workings of the Internet. Projects and problems include app development, visualization of data, cybersecurity, and simulation. This course aligns with the AP Computer Science Principles course.

**Principles of Engineering: Applied Physics**

**Credit: 2 + 3 DMACC**

**Prerequisite: Completion of Intro to Engineering Design (IED) prior to taking POE**

**Completion of Trigonometry by the end of the first semester of POE or concurrently enrolled in Advanced Algebra II**

**Grade: 11-12 or Science Department approval**

POE is a course that helps students understand the fields of engineering and physics. Exploring various technology systems and manufacturing processes help students learn how engineers use math, science and technology in an engineering solving process to benefit people. The course is heavily project-based and includes machine control through computer programming. Students should have a strong math background and show an interest in the STEM fields. This course is an applied physics course and is worth 2 high school science credits. **This course also corresponds to EGT410 in the DMACC course guide**.

**Pre-Calculus**

**Credit:                                 2 + 5 DMACC**

**Prerequisite: Trigonometry credit\*, 2 Algebra II credits, 2 Honors Algebra II or teacher**

 **Approval; Second Semester requires a qualifying ALEKS score**

Pre-Calculus is designed to prepare students for a course in calculus at the college level.  This course is for students who intend to continue their education in mathematics, engineering, science, or other math-related areas, or who are interested in learning mathematics as a part of their total education.  A secondary purpose is to provide students not planning a math-related career with the mathematics they need to pass-out of required math courses at the college level.  **Pre-Calculus corresponds to MAT 129 in the DMACC course guide**.  To qualify for the 5 hours of DMACC credit, a student must complete the full year class (fall and spring semesters) and register in the second semester with DMACC.

\*Trigonometry must be completed before or taken concurrently with first semester Pre-Calculus.

**AP Calculus**

**Credit:                                 2 + 5 DMACC**

**Prerequisite:                   2 Pre-calculus credits or instructor approval**

AP Calculus is designed to provide a thorough introduction into differential and integral calculus.  It is comparable to the first year calculus course taught at some colleges and universities.  Students who enroll in the course have the goals of getting a preview of calculus before college and/or acquiring sufficient skills and knowledge of the subject to enter a college mathematics program level higher than beginning calculus.

The overall objective of the course is to prepare students for the advanced placement test in calculus. Most colleges and universities grant college credit for scoring well on this exam.  **AP Calculus corresponds to MAT 211 in the DMACC** **course guide.**

**College Physics**

**Credit: 2 + 5 DMACC**

**Prerequisite: B or better in Chemistry and Trigonometry**

 **11-12 grade or teacher approval**

College Physics is an advanced two-semester science course that is taught by experimentation in the lab. Topics include the study of force, rectilinear motion, curvilinear motion, work, power, energy, wave motion, sound, light, optics, interference and diffraction. Computer science skills are taught using VBA in Excel to create physics applications. Mechanical engineering is taught creating projects each quarter culminating in a miniature roller coaster that will be entered into competition at Iowa State University in the spring. **Physics corresponds to PHY160 in DMACC’s course guide.**

**College Chemistry**

**Credit: 2 + 4 DMACC**

**Prerequisite: B+ or better in both semesters of Algebra or Algebra 1A & AB**

 **11-12 grade or teacher approval**

College Chemistry is a two-semester course with an emphasis on laboratory work. It is designed for students who might be considering majoring in a science field. Some topics investigated include atomic structure, electron configuration of the atom, the periodic table and periodic trends, chemical bonds, chemical composition, chemical reactions and equations, gas laws, solutions, acids and bases, thermodynamics, and a brief introduction to organic chemistry. A student must pass the 1st semester to enroll in the 2nd semester, and must pass both semesters to earn college credit.   **College Chemistry corresponds to CHM165 in DMACC’s course guide.**

**College AP Biology**

**Credit: 2 + 8 DMACC**

**Prerequisite: Successfully completed Chemistry or Physical Science or currently enrolled in Chemistry**

 **11-12 grade or teacher approval**

College AP Biology will cover a full range of biology concepts from microbiology to macro-biology. This is a college level biology course.  A fundamental understanding of chemistry concepts is important to a student's success in this class. First semester will focus on microbiology, such as biochemistry, cell biology, biochemical pathways, genetics, and heredity.  Second semester will emphasize macro-biology, such as evolution, taxonomy and classification of species, and the structure and physiology of plants and animals. **Qualifies for DMACC credit BIO 112 and BIO 113.**

**TECHNOLOGY ED./INDUSTRIAL TECHNOLOGY (Career and Technical Education)**

**Computer Design & Animation**

**Credit: 2**

**Prerequisite: C average or better in any 2 of the following courses: CAD I, CAD II, 2-D Art, 3-D Art, Computer Apps. I or instructor approval**

Computer Design and Animation is an advanced course designed to present design and animation fundamentals and principles. The first semester emphasizes experimentation and demonstration of practical skills and applications. Units include introduction to design, research and development, and production. Practical experience is gained through the creation of a student company, designing and creating a product and completing the steps necessary to manufacture and produce that product. Students will use computer design to produce product renderings, advertisements, company logos, and short animation sequences.

Second semester places the emphasis on creating 3D visualizations and animations. This is accomplished through the use of industry standard 3D Graphics software. Students will create an architectural rendering, an animation sequence, and a design of their own using advanced techniques. Students will also gain experience in presenting their works.

**Woodworking Technology I**

**Credit: 1**

**Prerequisite: None**

Woodworking Technology is a course which provides students the opportunity to study and use basic types of wood materials, hand and portable tools, industrial machines, joinery, fastening techniques, finishing, terminology and safety. Having knowledge in these areas leads to well-informed consumers and crafts people. It may also lead to a career in a wood-related industry or just a possible hobby.

**Woodworking Technology II**

**Credit: 1**

**Prerequisite: Woodworking Technology I**

Woodworking Technology II is a course which provides students the opportunity to continue their studies in types of wood materials, hand and portable tools, industrial machines, joinery, fastening techniques, finishing, terminology, and safety. Having knowledge in these areas leads to well-informed consumers and crafts people. It may all lead to a career in the wood industry or just a possible hobby. In this course, students will complete one required project and one project of choice with instructor approval. The choice project will have a minimum of one of the following: a door or drawer, require basic turning, or use advanced joinery.

**Building Construction**

**Credit: 1**

**Prerequisite: Woodworking Technology I minimum grade of C and instructor approval**

Building Construction will explore all areas of construction including residential, commercial, and civil construction. The processes of design, estimating, planning and the contractor’s role in scheduling will be included.

**Cabinetmaking and Millwork**

**Credit: 1**

**Prerequisite: C or better grade in Woodworking Tech I and II and instructor approval**

Cabinetmaking & Millwork is a course that provides students the opportunity to continue their studies in types of wood materials, hand and portable tools, industrial machines, joinery, fastening techniques, finishing, terminology and safety as well as research and design. Having knowledge in these areas leads to well informed consumers and crafts people. It may also lead to a career in the cabinetmaking and millwork industry or just a possible hobby.

**Introduction to Engineering Design**

**Credit: 2 + 3 DMACC**

**Prerequisite: Algebra 1, Recommended: Geometry**

Introduction to Engineering Design is a course that teaches problem solving skills using a design development process. Model solutions are created, analyzed, and communicated using solid modeling, computer design software. Students will be challenged with practical applications of math and science. Students should have a strong math background and show an interest in the STEM fields (Science, Math, Engineering and Technology). **Although highly recommended for serious science/math students the engineering courses cannot count for a science or math credit.** **This course does however correspond to EGT400 in the DMACC course guide.**

**Principles of Engineering: Applied Physics**

**Credit: 2 + 3 DMACC**

**Prerequisite: Intro to Engineering Design, completion of Algebra II or Geometry, and Recommended: Physics or concurrent enrollment; Trigonometry**

**Grade Level: 10-12**

POE is a course that helps students understand the field of engineering and engineering technology. Exploring various technology systems and manufacturing processes help students learn how engineers use math, science and technology in an engineering solving process to benefit people. The course is heavily project-based and includes machine control through computer programming. Students should have a strong math background and show an interest in the STEM fields (Science, Math, Engineering and Technology). **Although highly recommended for serious science/math students the engineering courses cannot count for a science or math credit.** **This course does however correspond to EGT410 in the DMACC course guide.**

**Computer Science and Software Engineering (CSE)**

 **Credit:               2 + 3 DMACC**

**Prerequisite:                   C or better in both semesters of Algebra I**

Using Python® as a primary tool and incorporating multiple platforms and languages for computation, this course aims to develop computational thinking, generate excitement about career paths that utilize computing, and introduce professional tools that foster creativity and collaboration. CSE helps students develop programming expertise and explore the workings of the Internet. Projects and problems include app development, visualization of data, cybersecurity, and simulation. This course aligns with the AP Computer Science Principles course.

**VOCATIONAL**

**Experience Based Career Exploration (EBCE**)

**Credit: 1 or 2**

**Grade Level: 11-12**

**Prerequisite: Occupational Social Skills**

Experience Based Career Exploration is designed to develop skills necessary in the workplace. Major emphasis is placed on actual experience in community businesses, interpersonal relations, appropriate work related behavior, and filling out forms necessary for employment.

**Occupational Social Skills**

**Credit: 2**

**Prerequisite: Teacher Approval**

**Grade Level : 10-11**

This year-long course presents functional curriculum about employment-related topics. This class is a practical approach to necessary information and skill building for a successful transition from school to the world of work and life outside of school. The primary objectives of this class are how to get a job, how to keep a job, and what to do with the money from that employment. Some of the topics covered in this curriculum include how to fill out an application, how to interview well, team building strategies, workplace social skills, and budgeting. This is the first class in the Vocational Program.

**Work Experience**

**Credit: .5 to 2**

**Grade Level: 11-12**

**Prerequisite: Completed application and Student Study Team approval** **or completed application and IEP students**

The Work Experience Program is a cooperative arrangement between student, school, and employer. Work Experience allows a student to gain job skills, earn money, and school credit through employment in the community. While on the job, the student will learn firsthand the skills/competencies needed to get and keep a job. Students must have a job ("cash" jobs and working for relatives does not count). Students should plan to meet with the coordinator once a week.

**School Based Vocational Training**

 **Credit:   1 or 2**

 **Grade Level:   9-12**

 **Prerequisite: Teacher Approval**

School Based Vocational Training will use a hands-on curriculum that operates in a simulated work environment. Strict work procedures are followed so students get the feel of real work, at the same time learn and explore new career/vocational areas.  Students will have training in basic career/vocational and life skills.  These skills relate to almost every type of career.  Skills are taught in a systematic format that helps students become more independent.  Life skills are taught to help students learn everyday skills. Students will be assessed on specific work areas to help them explore and develop career/vocational and life skills.