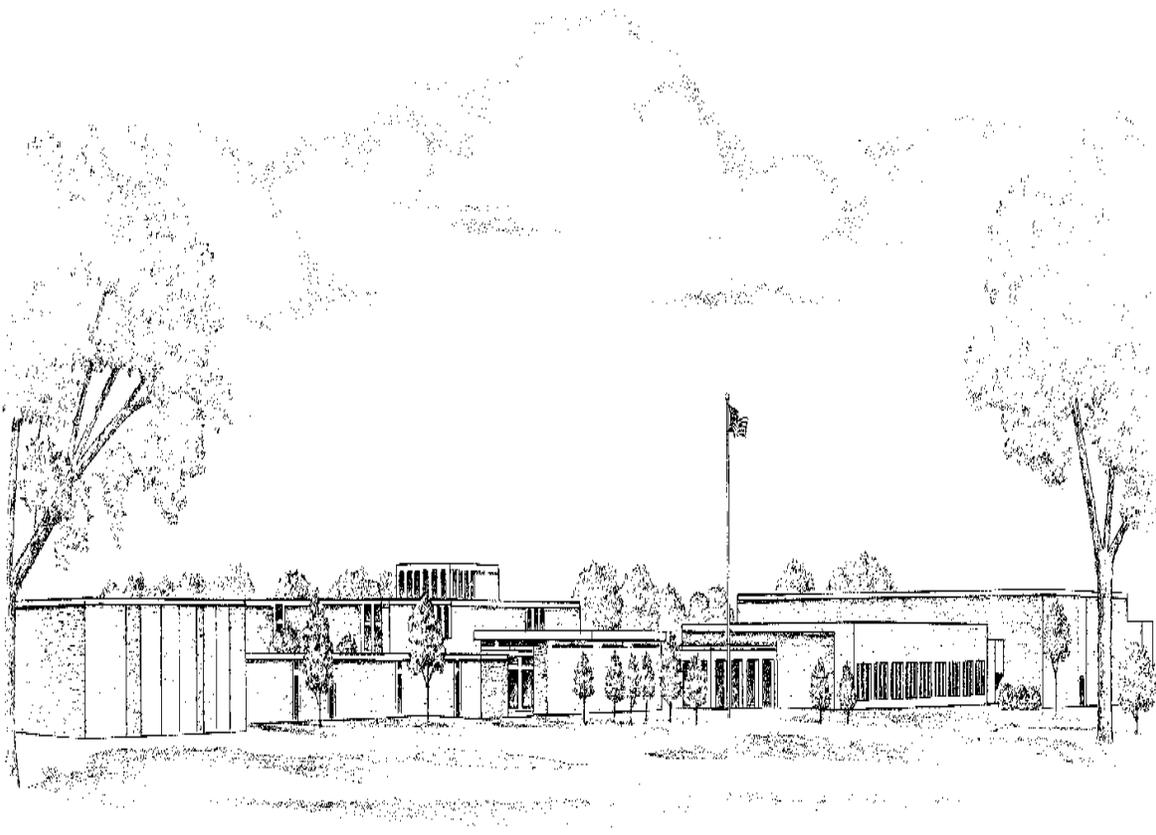


# Mason City High School

## Guidelines for Educational Planning



Name: \_\_\_\_\_

**2019-2020**

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# PROGRAM OF STUDIES

## Mason City High School

### PURPOSE OF THIS BOOKLET

The purpose of this booklet is to acquaint students and parents with the course offerings of Mason City High School and to provide information, which will assist in the appropriate selection of courses by students at the time of registration. It also includes information on Post Secondary entrance requirements, normal class load, credit value, requirements for graduation, progress reporting, and other topics important to students and parents when planning a program of high school studies.

Counselors can play an important role in helping students select courses at the time of registration. If parents or students wish to discuss their student's registration with the high school counselors, they are invited to call the Counseling Center at 421-4432.

### COUNSELING STAFF

Dusty Rhodes	9 <sup>th</sup> & 10 <sup>th</sup> Grade
Lindsey Severson	11 <sup>th</sup> Grade
Karla Wymore	12 <sup>th</sup> Grade

### ADMISSION

Students are admitted to Mason City High School on the basis of certified completion of the eighth grade.

### SCHEDULING PROCEDURE

During their high school career, students have an opportunity to visit individually, and in groups with a counselor and administrators concerning their educational and career plans.

The Program of Studies booklet is arranged according to the various academic areas available at Mason City High School. Students may enroll in any academic area where they meet the prerequisites or recommendations for that course.

### Student Services

Student services at Mason City High School include Counseling Services and the StAR Program for at-risk students. Regular education students may not register for StAR as one of their credit classes. Students are assigned to StAR as determined by the Student Assistance Referral Team. Students may earn ½ credit per semester with a total of 1 full credit earned during their high school career for successful completion of StAR goals. Students may be referred to the program any time during the school year.

### GENERAL REQUIREMENTS FOR GRADUATION

- A. Seven (7) semesters will be required of all students.  
(Exceptions to this may be considered for extenuating circumstances, which have been studied and have the approval of the parents and the high school administration.)
- B. Students must carry a minimum of eleven credits per year to stay on track for graduation. Students must be enrolled in at least 5 classes for credit each semester.
- C. Students may audit a course for no credit and have it recorded on their transcript only if the course has previously been taken for credit. Declaration of this intent must be made at the time of registration and approved by the Administration.
- D. A student who has received a passing grade in a course may repeat this course for the purpose of raising a grade but will not receive additional credit towards graduation for the course. Repeating the class should be accomplished prior to continuing to the next level in the subject. **The second grade will replace the first even if it is not higher, or is a failure.**
- E. Completion of a Senior Capstone as mandated by the Mason City Board of Education.

To graduate from Mason City High School, 12<sup>th</sup> grade students will develop a project that has emerged from their interests and insights over the past three years. This will be accomplished through research, through experience, through writing, and through speech. Students will demonstrate the way in which they have extended their knowledge in a written product and a speech presentation at the end of their capstone course which will provide evidence of the **District Learning Goals:**

- Perform as a self-directed learner
- Communicate appropriately and effectively
- Accept responsibility in a diverse and global society
- Think creatively and critically
- Access and use technology
- Participate in opportunities for personal growth and well-being
- Collaborate with others.

## REQUIREMENTS FOR GRADUATION

Forty-four (44) credits must be earned during grades 9-12 for graduation from high school. One credit is earned for a semester's study or the equivalent.

A senior capstone providing evidence of a student's progress in demonstrating the district's learning goals, effective writing, speaking, and critical thinking must be completed during the student's senior year in order to graduate.

Of the forty-four credits needed for graduation, the following are required:

English – Eight Credits (equivalent to four years)

Social Studies – Six Credits (equivalent to three years)

- (1) A United States History course – (2 semesters)
- (1) Government
- (1) Economics

Mathematics - Six credits

Science – Six Credits

Physical Education - Four credits

Electives – Fourteen credits

A minimum of fourteen (14) additional credits must be earned in addition to the above required credits so as to fulfill the requirement of 44 total credits for graduation.

Graduation requirements may be adjusted for transfer students.

## NORMAL LOAD

**Every student is required to carry a minimum of eleven (11) credits each year.** Students are encouraged to carry more than eleven credits when it seems advisable. All requests for arrangements other than stated above must involve the student, parent, counselor, and have the approval of the high school administration.

\* A credit is awarded upon successful completion of one semester of a normally scheduled course. One credit will be awarded for a class that meets 50 minutes daily for one semester.

\* Recommended number of credits:

Beginning of Sophomore year = 11 credits  
Beginning of Junior year = 22 credits  
Beginning of Senior year = 33 credits

## GUIDELINES FOR INDEPENDENT STUDY/TEACHER ASSISTANT

1. Teacher Assistant is any work done to provide assistance for a teacher, staff person, or office worker. This placement can be used to replace a study hall or free period during the day, with no credit awarded. Placement does NOT count toward full load exemption consideration.
2. Independent study, which allows a student to take a course described in the MCHS course offering on an independent basis, is normally taken for a letter grade, i.e. Spanish III. The student will follow the curriculum outlined in the curriculum guide and be evaluated on accepted class standards. Independent study for an existing course will NOT be allowed unless other options have been exhausted.
3. Independent study, which is for a course specifically developed for the student by a teacher at Mason City High School, must have clearly stated outcomes. Credit may be granted but no letter grade is awarded. Expectations for PASS should be high.
4. Independent study courses must be initiated within the first five days of each semester, including approval from team leader and principal. They will count as part of the five classes as long as credit is to be awarded upon completion.

The above options do not allow students to test out of specific courses. Permission for this is given only from the building principal. Such coursework receives only a PASS/FAIL. Normally an 80% demonstration of mastery is necessary for credit to be earned.

## GUIDELINES FOR COURSE SELECTION

As you read this booklet, consider the following:

1. Select several related occupational fields in which you are interested.
2. Your counselor can help you find out what courses are important to various career fields. Many courses are important to practically all occupations. If you plan wisely, you can change and modify your occupational objectives without losing the value of the courses you have already taken.
3. Select courses considering your specific needs. In most cases, you will have a well-rounded education if you include a variety of elective courses.
4. Evaluate the courses you should take not only in relation to occupational objectives, but also in relation to your interests, abilities, and past performance.
5. Study course descriptions so you will fully understand what the course is about and what will be expected of you as a student.
6. Have your **counselor** and **parents** help plan your high school program.
7. You should refer to your 4-year career plan developed in 8<sup>th</sup> grade when making course selections. Students will be required to revisit and update your plan each year.

## COURSE SELECTION PROCESS

Students will select courses during spring for the next school year. Selected courses will be verified before the end of that school year. Errors will be corrected during student registration.

### Dropping a Course:

A student may drop a course through the 30<sup>th</sup> day of the semester if the following conditions are met:

- A. The student is still carrying a minimum of 5 credits.
- B. After the first 5 days a request to drop form must be completed and all permission signatures obtained (parent, counselor, and administrator).
- C. Teacher is notified.
- D. If the student is passing at the time of the drop a WD will be recorded on the student's transcript. This will not affect grade point eligibility.
- E. If the student is failing at the time of the drop a FW will be recorded on the student's transcript. This **will** affect grade point and eligibility in the same way as a failing grade.

If a student chooses to drop a course after the 30<sup>th</sup> day of the semester a failing grade will be recorded on the student's transcript which **will** affect grade point and eligibility.

## PROCEDURES USED IN DETERMINING GRADE POINT AVERAGE

- A. A = 4.0 B = 3.0 C = 2.0 D = 1.0 Other F/FW/WD = 0.0
- B. Music, Driver Education, Teacher Assistant Work, Advisor/Advisee and pass-fail courses are not used in determining G.P.A.
- C. Principal's List 3.5 average or better.  
Honor Roll 3.0 - 3.49 average.
- D. Students earning a 3.5 G.P.A. for three consecutive semesters will be awarded an MCHS Academic Letter Award. An Academic Letter may be awarded upon graduation if the Senior Student has earned a cumulative GPA of 3.5 or higher.

## TRANSCRIPTS

Official transcripts (with the school seal), will be mailed by the Registrar to schools or agencies on written request of the student or parent. Students requesting transcripts for themselves will receive a copy without the official seal. Students will be able to request one transcript during the school year and one final transcript upon graduation at no charge. Additional transcripts requested while enrolled in high school will be provided for a fee of \$1 per transcript payable in the Counseling Center.

Once graduated, transcript fees are \$5 per request.

## GUIDELINES FOR CREDIT COURSES EARNED IN OTHER INSTITUTIONS

- A. Students who are presently enrolled at Mason City High School must obtain written, prior approval from an Administrator before beginning a course for credit from another academic institution.
- B. Students not enrolled at Mason City High School but who intend to transfer credit to Mason City High School must receive approval from the principal prior to beginning the credit course.
- C. Credit transferred to Mason City High School by new students from other accredited senior high schools will normally be accepted.

## POST SECONDARY ENROLLMENT OPTIONS ACT (PSEO)

**Juniors** and **seniors** can participate in the Post Secondary Enrollment Options Act which allows them to take classes at NIACC or other approved post secondary institutions during the school year. The cost of these courses (up to \$250) including the text is the responsibility of the school district unless the student drops or fails the class, at which time responsibility for payment shifts to the student. Both high school and college credit is awarded for completed courses and the grade will count in G.P.A. at MCHS. Although the College course may earn up to 4 hours of college credit, the high school credit is one semester credit per course. Counselor recommendation and administrative approval must be granted prior to enrollment. See your Counselor for more detailed information.

Consider these points regarding PSEO:

- 1) Students should be certain they have fully explored the high school curriculum prior to checking into the college options to prepare for the quicker pace and greater depth of college-level course work.
- 2) Students need to realize that college credit, even that taken during high school will be part of their permanent college transcript and will affect their high school and college cumulative GPA.
- 3) The application of this college course work could differ, depending on whether the high school unit requirements for admission to the college have already been fulfilled by high school course work. College level course work will usually result in college credit at other colleges. However, if the college course is used to fulfill the high school unit requirements of the college, the credit may come in as an elective rather than applying to General Education Requirements. Check with the college of your choice for details.
- 4) If you are enrolled in one or more NIACC classes, you will have the first 10 (TEN) days of each NIACC semester to drop the class (es) without MCHS penalty.
- 5) The student must notify their MCHS Counselor in writing, of intent to enroll in PSEO courses by March 15<sup>th</sup> for the following school year.

## POST SECONDARY ENROLLMENT OPTIONS ACT (PSEO)

**Juniors, seniors, and talented/gifted students** can enroll in PSEO during the high school academic school year. The cost of these courses, including the text (up to \$250), is the responsibility of the school district unless the student drops or fails the class, at which time responsibility for payment shifts to the student. Both high school and college credit is awarded for completed courses and the grade will count in the students GPA at MCHS. Although the college course may earn up to 4 hours of college credit, the high school credit is one semester credit per course. Counselor recommendation and administrative approval must be granted prior to enrollment. *See your high school counselor for more detailed information.*

Consider these points regarding PSEO:

1. Students should be certain they have fully explored the high school curriculum prior to checking into the college options to prepare for the quicker pace and greater depth of college-level course work.
2. Students need to realize that college credit, even taken during high school, will be part of their permanent transcript and cumulative GPA for both high school and college.
3. College level course work will usually result in college credit at other colleges. However, if the college course is used to fulfill the high school unit requirements of the college, the credit may come in as an elective rather than applying to General Education Requirements. Check with the college of your choice for details.
4. Students must meet proficiency requirements on the most recent Iowa Assessments scores.
5. If you are enrolled in a college class, you will have the first ten (10) days of each college semester to drop the class without **MCHS** penalty.
6. Students who elect to drop a college course after the first ten (10) days will receive a WD (withdrawal) grade if passing at the time of the drop on the MCHS transcript. If not passing the college course at the time of the drop, an FW (failure –withdrawal) grade will be posted on the MCHS transcript. Both F and FW grades received from a college course **WILL** impact academic eligibility for activities and your MCHS grade point average! In addition, the student will be billed up to \$250 by the high school.

## NIACC Contracted Courses Career Link

**Juniors, seniors, and talented/gifted students** can enroll in NIACC contracted courses during the high school academic school year. The cost of these courses, including the text, is the responsibility of the school district. Both high school and college credit are awarded for completed courses and the grade will count in the students GPA at MCHS. Although the college course may earn up to 4 hours of college credit, the high school credit is one semester credit per course. Counselor recommendation and administrative approval must be granted prior to enrollment. *See your high school counselor for more detailed information.*

Consider these points regarding NIACC contracted courses:

1. Students should be certain they have fully explored the high school curriculum prior to checking into the college options to prepare for the quicker pace and greater depth of college-level course work.
2. Students need to realize that college credit, even taken during high school, will be part of their permanent transcript and cumulative GPA for both high school and college.
3. College level course work will usually result in college credit at other colleges. However, if the college course is used to fulfill the high school unit requirements of the college, the credit may come in as an elective rather than applying to General Education Requirements. Check with the college of your choice for details.
4. Students must meet proficiency requirements on the most recent Iowa Assessments scores.
5. If you are enrolled in a college class, you will have the first ten (10) days of each college semester to drop the class without **MCHS** penalty.
6. Students who elect to drop a college course after the first ten (10) days will receive a WD (withdrawal) grade if passing at the time of the drop on the MCHS transcript. If not passing the college course at the time of the drop, an FW (failure –withdrawal) grade will be posted on the MCHS transcript. Both F and FW grades received from a college course **WILL** impact academic eligibility for activities and your MCHS grade point average!

### **NIACC Career Link Programs of Study**

Programs of study combine four years of high school education with two years of college education. Students select a program of study they would like to pursue. Within that program of study, students take college courses while still in high school. Students receive high school and college credit for these courses. Most courses are offered on the NIACC campus.

Visit with your high school counselor and NIACC representative for courses that will benefit your program of study.

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### **NIACC Career Link classes offered at MCHS include:**

#### **Nurse Aide Clinical (1 s.h.)**

Co-requisite: Nurse Aide Theory. The clinical experience includes 30 hours in a nursing facility.

**Nurse Aide Theory (2 s.h.)** Co-requisite: Nurse Aide Clinical. This 75-hour nurse aide course has been designed to meet the training requirements for aides working in nursing facilities (NF) and skilled nursing facilities (SNF). Emphasis in the course is on students achieving a basic level of knowledge and demonstrating skills to provide safe, effective resident care. The course has been developed in six units of study. The theory portion includes 30 hours of classroom time and 15 hours of laboratory practice.

Nurse Aide Theory and Clinical are offered during the spring semester.

## **EARLY GRADUATION**

We urge parents and the student to analyze and discuss the possible advantages and disadvantages of early graduation and to arrive at a mutually acceptable plan before making a final decision. School personnel will gladly serve as a resource for responding to questions, providing information, and assisting in discussing your concerns; however, the ultimate responsibility for this educational decision must be assumed by the parents and the student.

- A. A student who plans to graduate early from Mason City High School must have completed a preliminary application procedure on or before **November 1** of his/her seventh semester.
- B. To be considered for early graduation, a student must have successfully completed forty-four credits and satisfied all of the graduation requirements including portfolio and senior presentation. In addition, the student's parents/guardians, the assigned counselor and High School Principal must endorse the petition for early graduation before the request is recognized and approved.

## **PARTICIPATION IN EXTRA-CURRICULAR ACTIVITIES**

In order to reach our primary goal of academic accomplishment it will be necessary to have passing grades in accordance with state and local guidelines to be academically eligible for participation in extra-curricular activities at Mason City High School.

If not passing all classes at end of a final grading period, student is ineligible for first period of 30 consecutive calendar days in the inter-scholastic athletic event in which the student is a contestant. There is no requirement that the student competed in the sport previously.

Students in baseball or softball have the same penalty as all other students.

# Building Your Future: Preparing for Academic Success at Iowa's Regent Universities

		Minimum Requirements for Admissions			Optimum Recommendations for Success
		Iowa State University	The University of Iowa	University of Northern Iowa	
<b>ENGLISH</b>	4 YEARS emphasizing writing, speaking, and reading, as well as understanding and appreciation of literature.	4 YEARS with an emphasis on the analysis and interpretation of literature, composition, and speech.	4 YEARS including one year of composition. Also may include one year of speech, communication, or journalism.	4 YEARS with an emphasis on the communication skills of writing, reading, and listening, and the analysis and interpretation of literature. In addition, courses in journalism and media literacy will be valuable. Extracurricular activities in debate, speech contest, newspaper, and yearbook will further develop essential competencies.	
<b>MATH</b>	3 YEARS including one year each of algebra, geometry, and advanced algebra.	3 YEARS including two years of algebra and one year of geometry for admission to the College of Liberal Arts and Sciences. 4 YEARS including two years of algebra, one year each of geometry and higher math (trigonometry, analysis, or calculus) for admission to the College of Engineering.	3 YEARS including the equivalent of algebra, geometry, and advanced algebra.	4 YEARS, one in each year of high school. While advanced courses like calculus and statistics are good, it's more important that you gain a complete understanding of advanced algebra and trigonometry.	
<b>NATURAL SCIENCE</b>	3 YEARS including one year each from any two of the following: biology, chemistry, or physics.	3 YEARS including one year each from any two of the following: biology, chemistry, or physics for admission to the College of Liberal Arts and Sciences. 3 YEARS with at least one year each in chemistry and physics for admission to the College of Engineering.	3 YEARS including courses in general science: biology, chemistry, earth science, or physics. Laboratory experience is highly recommended.	4 YEARS, one in every year of high school. To be really well prepared, take at least one year each of biology, chemistry, and physics. These can be taken in any order and may be taught productively in either a separated or an integrated fashion, depending on your school's offerings.	
<b>SOCIAL STUDIES</b>	2 YEARS for admission to the Colleges of Agriculture, Business, Design, Engineering or Human Sciences. 3 YEARS for admission to the College of Liberal Arts and Sciences.	3 YEARS with U.S. history and world history recommended for admission to the College of Liberal Arts and Sciences. 2 YEARS with U.S. history and world history recommended for admission to the College of Engineering.	3 YEARS including courses in anthropology, economics, geography, government, history, psychology, or sociology.	3 YEARS are essential, but four are better. Take at least one year of U.S. history and one year of world history. Additional courses in anthropology, economics, political science, psychology, and sociology provide an important understanding of our political, social, and economic institutions.	
<b>FOREIGN LANGUAGE</b>	2 YEARS of a single foreign language for admission to the College of Liberal Arts and Sciences (and effective Fall 2009, for the College of Engineering). Foreign language is not required for admission to the Colleges of Agriculture, Business, Design, or Human Sciences.	2 YEARS of a single foreign language.	Foreign language courses are not required for admission. However, two years of foreign language in high school with a C or above in the last course will meet the University graduation requirement.	4 YEARS of a single foreign language. By taking foreign language during all four years of high school, you'll go beyond the basic skill and begin to use the language and reinforce your fluency.	
<b>OTHER COURSES</b>	Specific elective courses are not required for admission.	Specific elective courses are not required for admission.	2 YEARS of additional courses from the required subject areas: foreign language, or the fine arts.	EXPLORE! Courses in fine arts, performing arts, computers, or technology will help round out your high school experience. Your future study or career may focus on one of those areas. Follow your interests, talents, and the strengths of your school. Remember to choose courses with high academic standards.	

### Regent Admission Index (RAI) Score

The Regent Admission Index (RAI) combines four factors that strongly predict success at Iowa's regent universities: ACT score, high school percentile rank, high school grade-point average (GPA), and the number of high school courses completed in core subject areas. Applicants who achieve at least a 245 RAI score and who meet the minimum high school course requirements will automatically be offered admission.

### How to calculate your RAI:

$$\begin{array}{r} 2 \times \text{ACT Composite Score (or the SAT Equivalent)} \\ + \\ 1 \times \text{High School Percentile Rank} \\ + \\ 20 \times \text{High School GPA} \\ + \\ 5 \times \text{Number of Core Courses Completed} \\ \text{by High School Graduation} \\ = \\ \text{RAI Score} \end{array}$$

### Which core courses count in the RAI?

Any college-prep course in English, mathematics, science, social studies, and foreign language can be used in calculating a student's RAI score. To be considered for admission, students must have taken (or plan to take) at least 15 college-prep courses (full-year) including the following:

- 4 years of English
- 3 years of mathematics, including Algebra I, Algebra II, and geometry (Engineering requires a 4<sup>th</sup> year of mathematics)
- 3 years of social studies (Engineering requires only 2 years)
- 2 years of the same foreign language
- 3 years of science, including one year from two of these areas: biology, chemistry, and physics; and a third year from any science area.

All other courses in these areas (above and beyond those required for admission), can be used in calculating the RAI. High school counselors can help students and parents determine which courses qualify as "college-prep" or students can call the Office of Admissions.

# COLLEGE ATHLETICS

## Post High School Initial-Eligibility Requirements

### NCAA Eligibility Center

#### **DIVISION I AND II**

##### Core Courses

\*NCAA Divisions I and II require 16 core courses. See the charts below.

\*Beginning August 1, 2016, NCAA Division I will require 10 core courses to be completed prior to the seventh semester (seven of the 10 must be a combination of English, math, or natural or physical science that meet the distribution requirements below). These 10 courses become “locked in” at the start of the seventh semester and cannot be retaken for grade improvement.

*\*Beginning August 1, 2016, it will be possible for a Division I college-bound student-athlete to still receive athletics aid and the ability to practice with the team if he or she fails to meet the 10 course requirement, but would not be able to compete.*

##### Test Scores

\*Division I uses a sliding scale to match test scores and core grade-point averages (GPA). The sliding scale for these requirements are shown on the website [www.eligibilitycenter.org](http://www.eligibilitycenter.org).

\*Division II requires a minimum SAT score of 820 or an ACT sum score of 68.

\*The SAT score used for NCAA purposes includes **only** the critical reading and math sections. The writing section of the SAT is not used.

\*The ACT score used for NCAA purposes is a **sum** of the following four sections: English, mathematics, reading and science.

**When you register for the SAT or ACT, use the NCAA Eligibility Center code of 9999 to ensure all SAT and ACT scores are reported directly to the NCAA Eligibility Center from the testing agency. Test scores that appear on high school transcripts will not be used.**

##### Grade-Point Average

\***Be sure** to look at your high school’s List of NCAA Courses on the NCAA Eligibility Center’s website ([www.eligibilitycenter.org](http://www.eligibilitycenter.org)).

Only courses that appear on your school’s List of NCAA Courses will be used in the calculation of the core GPA. Use the list as a guide.

\***Division I** students enrolling full-time **before August 1, 2016**, should use Sliding Scale A to determine eligibility to receive athletic aid, practice and compete during the first year.

\***Division I** GPA required to receive athletic aid and practice on or after August 1, 2016, is 2,000-2,299 (corresponding test-score requirements are listed on Sliding Scale B on the eligibility center website).

\***Division I** GPA required to be eligible for competition on or after August 1, 2016, is 2,300 (corresponding test-score requirements are listed on Sliding Scale B on the eligibility center website).

\***The Division II** core GPA requirement is a minimum of 2,000.

\*Remember, the NCAA GPA is calculated using NCAA core courses only.

<b>DIVISION I</b>	
<b>16 Core Courses</b>	
4	years of English.
3	years of mathematics (Algebra I or higher).
2	years of natural/physical science (1 year of lab if offered by high school).
1	year of additional English, mathematics or natural/physical science.
2	years of social science.
4	years of additional courses (from any area above, foreign language or comparative religion/philosophy).

<b>DIVISION II</b>	
<b>16 Core Courses</b>	
3	years of English.
2	years of mathematics (Algebra I or higher).
2	years of natural/physical science (1 year of lab if offered by high school).
3	years of additional English, mathematics or natural/physical science.
2	years of social science.
4	years of additional courses (from any area above, foreign language or comparative religion/philosophy).

**For more information, visit the NCAA Eligibility Center website at**

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

# COLLEGE ATHLETICS

## Post High School Initial-Eligibility Requirements

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### **DIVISION III**

Division III colleges and universities set their own admission standards. The NCAA does not set initial eligibility requirements in Division III. For more details about academic requirements visit the Eligibility Center at [www.eligibilitycenter.org](http://www.eligibilitycenter.org) or contact the school's Athletic Department.

### **NAIA**

Freshman Eligibility Requirements: if you will graduate from a United States high school this spring and enroll in college this coming fall, the requirements are simple. An entering freshman must:

Be a graduate of an accredited high school or be accepted as a regular student in good standing as defined by the enrolling institution and meet **two of the three** following requirements. If as an entering freshman you do not meet at least two of the three standards, you cannot participate in athletics for the first full year of attendance (2 semesters, 3 quarters, or equivalent).

### **MUST MEET TWO OF THE THREE**

#### **1. TEST SCORE REQUIREMENT**

*Achieve a minimum of 18 on the ACT or 860 on the SAT*

Tests must be taken on a state, national or international testing date; scores must be achieved on a single test. The SAT must be achieved on the Critical Reading and math sections only. The Writing score cannot be used. You must pass the standardized test prior to the term in which you want to participate in athletics.

When registering for the tests, students should indicate the NAIA code "9876" to have their scores sent directly to the NAIA Eligibility Center.

#### **2. HIGH SCHOOL GPA REQUIREMENT**

*Achieve a minimum overall high school grade point average of 2.0 on a 4.0 scale.*

The NAIA accepts the grade point average determined by the high school, provided it is recorded and awarded in the same manner as for every other student at the school.

#### **3. CLASS RANK REQUIREMENT**

*Graduate in the top half of your high school class.*

If a student's class rank does not appear on the transcript, a signed letter from the principal or headmaster, written on the school's letterhead and with the school's official seal, stating the student's final class rank position or percent may be submitted.

**Learning disabilities.** Students with diagnosed learning disabilities, who do not meet the freshman eligibility requirements, may have their academic profiles reviewed by the NAIA National Eligibility Committee at the request of an NAIA institution.

**For more information, visit the NAIA Eligibility Center website at [www.PlayNAIA.org](http://www.PlayNAIA.org).**

### **JUNIOR COLLEGE**

Freshman must hold a high school diploma or G.E.D., and they must be enrolled in a minimum of 12 semester hours for the first semester of competition. The minimum requirements after that are 12 semester hours with a 1.75 GPA for second semester and 24 semester hours with a 2.0 GPA for the second year. For more information contact the school's Athletic Department.

# EXPLORING CAREER PATHWAYS

## **The Career Development Program at M.C.H.S.**

The Career Development Program at M.C.H.S. promotes the Mason City Community School District's Learning Goals by assisting students in establishing personally meaningful career plans. The center provides the opportunity for all M.C.H.S. students to gather information to meet their individual needs. In addition, the Career Center is a support to classroom instruction related to career development by offering resources and strategies that strengthen existing career development activities in the curriculum. Assistance will be offered to parents in planning for their child (ren)'s educational and career goals.

### **\*\*\* AGRISCIENCE AND NATURAL RESOURCES PATHWAY**

Careers in this pathway are related to the environment and natural resources and include occupations in agribusiness, agriculture, animal science, forestry, horticulture, and wildlife management.

#### **Professional Careers**

Agricultural Business/Law  
Biological Science  
Education/Extension  
Environmental Science  
Forestry  
Horticulture  
Soil & Crop Science  
Veterinary Medicine  
Wildlife Management

#### **Skilled Careers**

Agribusiness/Natural Resources  
Agricultural Mechanics  
Fire Protection Technician  
Horticultural Aide  
Landscape Management  
Natural Resources Technician  
Production Agriculture  
Taxidermy  
Veterinary Technician

#### **Entry-Level Careers**

Caretaker  
Dispatcher  
Equipment Handler  
Farm Worker  
Grader & Sorter  
Groundskeeper/Gardener  
Inventory Control Clerk  
Greenhouse Worker

### **\*\*\* ARTS, MEDIA AND COMMUNICATIONS PATHWAY**

Careers in this pathway are linked to the humanities and include performing, visual and literary arts as well as the communication media. Some occupations include those in creative writing, dance, editing, film, fine arts, graphic arts, journalism, modeling, music, photography, radio telecommunications, theatre and translating.

#### **Professional Careers**

Art History  
Art and Music Therapy  
Broadcast Technology Management  
Communication & the Arts  
Education  
Foreign Language  
Graphic Arts Management  
Humanistic Studies  
Journalism  
Theatre & Drama

#### **Skilled Careers**

Commercial Art  
Computer Graphics  
Court & Conference Reporting  
Industrial Screen Printing  
Interior Design  
Marketing Communications  
Printing & Publishing  
Radio Broadcasting  
Technical Communications  
Visual Communications

#### **Entry-Level Careers**

Camera Operator  
Telephone Operator  
Dispatcher  
Printing Press Setter  
Telephone/TV Line Installer  
Photographer  
Photo Process Worker  
Screen Printing Setter  
Switchboard Operator

### **\*\*\* BUSINESS/INFORMATION SYSTEMS, AND MANAGEMENT/MARKETING PATHWAY**

Careers in this pathway are in the fields of business and marketing. Some occupations include those in accounting, administrative support staff, advertising, computer science, distribution, finance, insurance, international business, management, marketing research, merchandising, personnel, purchasing, real estate, sales, and tourism.

#### **Professional Careers**

Accounting/Finance  
Administrative Management  
Business Administration  
Computer Science & Statistics  
Education

Human Resources Management  
Information Systems  
International Business  
Personnel/Human Resources

#### **Skilled Careers**

Accounting Assistant  
Administrative Assistant  
Business Support Specialist  
Banking & Financial Services  
Computer Programming/Analyst  
General Office Clerks  
Information Processing  
Hotel/Motel Management  
Medical Records Technician  
Small Business Management

#### **Entry-Level Careers**

Adjustments Clerk  
Billing & Posting Operator  
Dispatcher  
File Clerks  
Food Service/Lodging Manager Data Processing  
Insurance Claim Clerk  
Letterpress Setters  
Mail Clerks  
Receptionist  
Warehouse Stock Clerk

### **\*\*\* ENGINEERING AND INDUSTRIAL TECHNOLOGIES PATHWAY**

Careers in this pathway are related to engineering, science, technology, construction, manufacturing, and transportation. Some occupations include airline pilots, archeologists, architects, assemblers, carpenters, drafters, engineers of all types, machinists, mechanics, scientists, tool and die makers, and truck drivers.

#### **Professional Careers**

Applied Math & Physics  
Architect  
Applied Technology  
Computer Science  
Education  
Engineering  
Genetics  
Geology  
Paper Science  
Scientist

#### **Skilled Careers**

Auto Body Repair/Paint Technician  
Air Conditioning & Heating  
Appliance Service  
Architectural Drafting  
Bricklaying/Masonry  
Cabinetmaking/Millwork  
Carpentry  
Electronic Design Technician  
Engine Technology  
Industrial Engineering Technician

#### **Entry-Level Careers**

Bread & Pastry Baker  
Carpet Installer  
Drywall Installer  
Excavating Operator  
Grader & Dozer Operator  
Hoist & Winch Operator  
Mechanic & Repair Helper  
Painter & Pipe fitter Helper  
Roofer

### **\*\*\* FAMILY CONSUMER AND HUMAN SERVICES PATHWAY**

Careers in this pathway are linked to family/consumer, economic, political and social systems. Some occupations in this career area include those in hospitality and recreation, public and community service, and the broad field of social services. Careers such as those in child care, cosmetology, economics, education, fire protection, food service, government, history, law, hotel and restaurant services, law enforcement, the military, and recreation may be found in this career pathway.

#### **Professional Careers**

Social & Behavioral Science  
Communications Disorders  
Criminal Justice  
Education  
Hospitality/Tourism Management  
Law  
Nutritional Science  
Psychology  
Public Administration

#### **Skilled Careers**

Barber/Cosmetologist  
Chef  
Child Care Services  
Clothing Design & Sales  
Corrections Services  
Facility Maintenance Service  
Food Technician  
Interior Design  
Paramedic  
Police Science

#### **Entry-Level Careers**

Cashier  
Counter & Rental Clerk  
Custodian & Cleaner  
Cafeteria Attendant  
Food Service/Lodging  
General Office Clerk  
Postal Service Clerk  
Private Child Care Worker  
Refuse Collector  
Welfare Eligibility Worker

### **\*\*\* HEALTH SERVICES PATHWAY**

Careers in this pathway are part of the health services field. They include occupations in hospital services, medical technology, medicine, nursing, optometry, pharmacy, psychiatry, psychology, therapy, and others.

#### **Professional Careers**

Art/Music Therapy  
Clinical Laboratory  
Education  
Health Care Administration  
Medical Science  
Medicine  
Microbiology  
Pharmacy  
Physical therapy  
Veterinarian

#### **Skilled Careers**

Dental Hygienist  
Dispensing Optician  
Emergency Medical Services  
Health Unit Coordinator  
Human Services Associate  
Medical Laboratory Technician  
Pharmacy Technician  
Practical Nurse

#### **Entry-Level Careers**

Dental Assistant  
Dental Lab Technician  
Dietary Aide  
Home Health Aide  
Interviewing Clerk  
Orderly and/or Attendant

## STEM Education in Mason City High School (Roadmap)

**Basic Definition of Science, Technology, Engineering and Mathematics (STEM)**, excerpted from *Iowa STEM Education Roadmap, 2011*

**Science** can be characterized as the knowledge of the physical world gained through systematic observation and experimentation. A process by which this knowledge is developed is referred to as the scientific method, though in reality, scientists use different methods for different challenges. Typically, developing a testable or falsifiable hypothesis is a crucial first step in the traditional scientific method. Properly designed experiments test hypotheses and credibility is determined by how well a hypothesis is supported by physical data. Scientific methods, through many mechanisms for identifying mistakes, have the ability to discard inaccurate hypotheses and retain those that have withstood significant testing.

**Technology** is the application of scientific knowledge to the development of tools, machines, materials, or processes that change or manipulate the human environment to accomplish practical tasks or objectives. Technology is intimately related to science and to engineering. Whereas science deals with understanding and engineering uses that knowledge to create plans and designs, technology creates the tools and techniques to implement those plans and designs.

**Engineering** is the application of scientific principles to the design of a device, system, or process to accomplish a defined task. Engineers use approximate solutions to problems that cannot be solved exactly by science and mathematics as well as semi-empirical methods to achieve desired objectives. Although scientific and engineering processes may be different, scientists must use engineering to design and implement experiments while engineers often need to use the scientific method to test devices, processes, or systems. The two disciplines are inseparable.

**Mathematics** is the language by which one communicates science and engineering concepts, and is a discipline in its own right which has trained the world's greatest thinkers through history. Mathematically formulating problems lets scientists and engineers develop models of real and hypothetical phenomena, develop hypotheses, make predictions, conjectures, design devices and protocols, and express and evaluate data. Advances in an area of science have often led to advances in an area of mathematics and vice versa.

**STEM Literacy** refers to an individual's ability to apply his or her understanding of how the world works within and across the four areas of science, technology, engineering, and mathematics. It does not simply mean achieving literacy in these areas individually. Rather, STEM literacy refers to the ability to investigate and question these facets of the world in an interdisciplinary manner.

### Math Courses that support a STEM education

**162131/162132**

**ALGEBRA 1**

ONE CREDIT PER SEMESTER

TWO SEMESTER COURSE

PREREQUISITE: INTRO TO ALGEBRA PRE-ALGEBRA  
OR DEPT APPROVAL

Algebra 1 includes the study variable expressions, functions and relationships, solving variable equations, graphing techniques, solving systems of equations and inequalities, applications of lines, polynomial operations, and quadratic functions and equations.

**162151/162152**

**GEOMETRY**

ONE CREDIT PER SEMESTER

TWO SEMESTER COURSE

PREREQUISITE: ALGEBRA 1

This course emphasizes properties and relationships of points, lines, planes and solids. Topics studied are: symmetry, modeling techniques, the structure of geometry, basic definitions, postulates, theorems, proof, angles and parallel lines, triangles, quadrilaterals, other polygons, polyhedrons, the Pythagorean Theorem, similarity and congruence, circles and spheres, area, surface area, volume, transformations, and simple trigonometry. The probability of success is greatly increased if the student has maintained a C or above in the previous course.

**162141/162142**

**ALGEBRA 2**

ONE CREDIT PER SEMESTER

TWO SEMESTER COURSE

PREREQUISITE: GEOMETRY

C IN GEOMETRY AND ALGEBRA 1 OR DEPT APPROVAL

Algebra 2 reviews and builds upon the concepts of Algebra 1 and Geometry. Topics of study are: advanced polynomial manipulations, rational expressions and equations, polynomial functions, quadratic relationships and their applications, exponential and logarithmic functions, basic statistics, and an introduction to trigonometry including the unit circle. Use of a graphing calculator is required throughout this text. The probability of success is greatly increased if the student has maintained a C or above in the previous course.

**162411/162412**

**PRE-CALCULUS**

ONE CREDIT PER SEMESTER  
TWO SEMESTER COURSE  
PREREQUISITE: ALGEBRA 2  
**C IN ALGEBRA 2 OR DEPT APPROVAL**

Pre-Calculus continues the study of algebra while integrating the concepts of geometry. Topics of study are: graphing and solving functions, polynomial functions, rational functions, exponential and logarithmic functions, trigonometry functions, analytic trigonometry, applications of trigonometry, parametric and polar equations, matrix systems, and sequences and series. Concepts are studied numerically, graphically, and analytically. The graphing calculator is used extensively in this course. There is also an emphasis on problems that use the concepts in real life. The probability of success is greatly increased if the student has maintained a C or above in the previous course.

**162431/162432**

**AP CALCULUS**

ONE CREDIT PER SEMESTER  
TWO SEMESTER COURSE  
PREREQUISITE: PRE-CALCULUS  
**C IN PRE-CALCULUS OR DEPT APPROVAL**

Calculus makes extensive use of the trigonometry and advanced algebra skills taught in Pre-Calculus. These skills are reinforced and used to study differential calculus as well as integral calculus. Extensive use of computer programs and the graphing calculator help the students visualize and practice these calculus concepts. A college level Calculus and Analytic Geometry book is used. Problem solving strategies and critical thinking skills are stressed throughout the course. The probability of success is greatly increased if the student has maintained a C or above in the previous course.

By the end of this course, students will have studied all of Calculus I and much of Calculus II.

**Science Courses supporting a STEM education**

**182521/182522**

**BIOLOGY**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE

Biology is a challenging course designed for all students. Investigations are focused toward the ecological basis of life, biodiversity, cell structure and function, genetics, variation and adaptation, and human biology. This course is open to incoming 9<sup>th</sup> graders who are looking for a strenuous course as a freshman. Preference will be given to those that are in Algebra or higher as an 8<sup>th</sup> grader because the course is designed for 10<sup>th</sup> – 12<sup>th</sup> graders and will ensure success with pre-requisites in future college bound science classes. 9<sup>th</sup> graders wanting to take this class must show proficiency on a Foundations of Science test at the end of 8<sup>th</sup> grade.

**182621/182622**

**PHYSICS**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE  
PREREQUISITE: GEOMETRY

This course is intended for college bound students with career interests in any of the sciences, mathematics, computers or engineering. Physics attempts to prepare them for the rigorous courses they will face in college. Laboratory experiments constitute a major portion of the course. Topics include force, motion, energy, heat, waves, light, and electricity.

**182721/182722**

**CHEMISTRY**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE  
PREREQUISITE: ALGEBRA 1

The study of chemistry explores the matter that makes up our universe. Solving complex problems is a focus of both the classroom and laboratory. Units of study include; scientific measurement, the atom, the periodic table, chemical bonding, reactions, gas laws, aqueous solutions, and chemical equilibrium. This course is designed to prepare students for courses they will take in college.

**182561/182562**

**AP BIOLOGY**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE  
PREREQUISITE: BIOLOGY (A or B grade)  
A-B GRADES IN ALL OTHER SCIENCE COURSES  
CHEMISTRY IS STRONGLY RECOMMENDED  
BEFORE TAKING AP BIO

Advanced Biology is designed to be the equivalent of a college introductory Biology course for Biology majors. It differs significantly from Biology in the textbook, the range and depth of topics, and the effort and time required by students. The goal of Advanced Biology is to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. The course focuses on understanding important relationships, processes, mechanisms, and potential extensions and applications with an understanding of specialized terminology and technical details. It is recommended that students have earned an A or B in the prerequisite courses of Biology and all other science classes. This is a very rigorous and intense course.

**182641/182642**

**AP PHYSICS**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE  
PREREQUISITE: ALGEBRA 2 AND PHYSICS  
OR CALCULUS

Advanced Physics is designed for those students whose career plans will require them to study Physics in college. The topics covered are similar to the topics in Physics, but are done at a greater depth. The laboratory work and the mathematical relationships are particularly more challenging. This course prepares students to take the Advanced Placement Physics Exam B in May. It is recommended that students have earned an A or B in the prerequisite courses of Physics and Algebra II.

\* Students taking the Advanced Placement exam will have the AP designation added to their transcript if they score a 3 or better.

**182761/182762**

**AP CHEMISTRY**

ONE CREDIT PER SEMESTER  
2 CREDIT COURSE  
PREREQUISITE: CHEMISTRY

Advanced Chemistry is designed to be the equivalent of an introductory college chemistry course for science majors. Both the textbook assignments and laboratory requirements are similar to college work. Students electing to take this course should be willing to spend at least five hours weekly on out-of-class assignments. Advanced Chemistry expands on concepts begun in high school chemistry and will move at a college pace, considerably faster than that of the high school level course. The material is rigorous and students need to be committed, organized, and able to maintain the pace. It is recommended that students have earned an A or B in the prerequisite course of Chemistry.

\* Students taking the Advanced Placement exam will have the AP designation added to their transcript if they score a 3 or better.

**Other Courses Supporting a STEM education**

**264623**

**MECHANICAL DRAWING**

ONE CREDIT COURSE

Students will learn basic drafting procedures and apply these principles through the use of drafting equipment. They will understand and create drawings using various drafting drawing styles. Students will learn to apply spatial relationships and visualization techniques to create 2D and 3D drawings and CAD sketches. They will learn how to transfer their drawing from paper to computer to machine to create a physical reproduction of their drawing. Students will have access to industry-standard equipment and programs for this project including MasterCam, laser engraver, three-axis CNC mill, five-axis robotic arm normally used in manufacturing and/or 3D printer. At the successful completion, students will learn and apply skills and techniques necessary to complete drafting projects. Computer drawing programs will be used for half of the class.

# Art

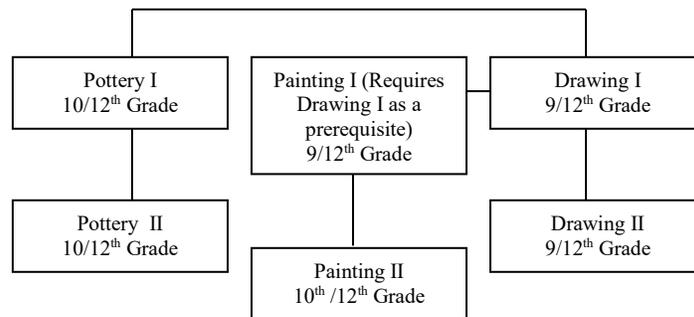
## **Dominant Career Pathways related to the M.C.H.S. Curriculum:**

- (1) Arts and  
Communication**
- (2) Business/Information  
Management/Marketing**

# Art Department

COURSE	9	10	11	12	ONE SEMESTER	TWO SEMESTER	CREDIT	PREREQUISITE REQUIRED
Pottery I		X	X	X	X		1	NO
Pottery II		X	X	X	X		1	YES
Painting I	X	X	X	X	X		1	YES
Painting II		X	X	X	X		1	YES
Drawing I	X	X	X	X	X		1	NO
Drawing II	X	X	X	X	X		1	YES

## Art Department





# **Business**

## **Dominant Career Pathways related to the M.C.H.S. Curriculum:**

- (1) Business/Information**
- (2) Management/Marketing**
- (3) Communication**
- (4) Information Technology**

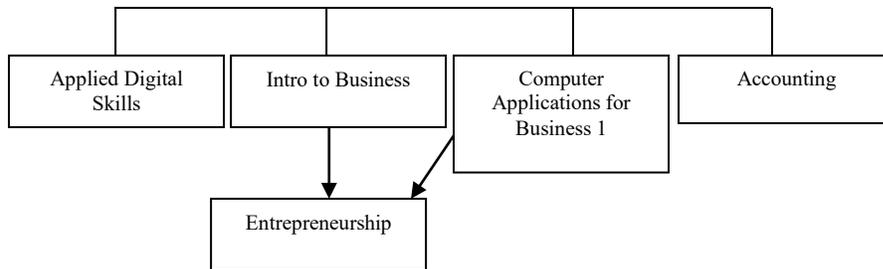
# Business Education

Course Title	9	10	11	12	ONE SEMESTER	TWO SEMESTER	CREDIT	PREREQUISITE REQUIRED
Introduction to Business	X	X	X	X	X		1	NO
Computer Applications for Business	X	X	X	X	X		1	NO
Accounting		X *	X	X		X	2	NO
Entrepreneurship**			X	X	X		1	YES
Applied Digital Skills – Google Apps	X	X	X	X	X		1	NO

\*Must be a sophomore in the top half of graduating class to be considered for Accounting.

\*\* Must have taken Intro to Business and/or computer Applications for Business to be considered for Entrepreneurship.

## Business/Computer Education





# **Family & Consumer Science**

## **Dominant Career Pathways related to the M.C.H.S. Curriculum:**

- (1) Family and Human Services**
- (2) Health Sciences**
  - (A) CNA Program**
  - (B) NIACC Tech Area**
    - (1) Nursing**
    - (2) Physical Therapy Assistant**
    - (3) Medical Assistant**
- (3) Food Services**
  - (A) Restaurant**
  - (B) Commercial Food Service**
    - (1) Schools**
    - (2) Hospitals**
    - (3) Nursing Homes**
  - (C) Food Company Employment**
  - (D) Food and Agriculture Employment**

# FAMILY AND CONSUMER SCIENCE

Course Title	9	10	11	12	ONE SEMESTER	TWO SEMESTER	CREDIT	PREREQUISITE REQUIRED
Culinary Arts I	X	X	X	X	X		1	NO
Culinary Arts II	X	X	X	X	X		1	YES
Culinary Arts III		X	X	X		X	2	YES
Culinary Arts IV			X	X		X	2	YES

## Family and Consumer Science

**223611**

**CULINARY ARTS I**

ONE CREDIT COURSE

This introductory, semester course consists of units on career opportunities, food safety and sanitation, recipes, use and care of equipment, cooking and baking techniques, culinary nutrition, and a focus on plate presentation for a wide variety of labs.

**223612**

**CULINARY ARTS II**

ONE CREDIT COURSE

PREREQUISITE: CULINARY ARTS I

Grade of C or better

This semester course includes units on customer service and dining environments, food service management and labs that include soups, sandwiches, pastas and sauces, meat cookery, specialty desserts and buffet presentation.

**223613**

**CULINARY ARTS III**

TWO CREDIT COURSE (Full Year)

PREREQUISITE: CULINARY ARTS II

Grade of C or better

Culinary Arts III is a year-long, project-based course. Students plan menus, shop for ingredients, and prepare/serve food for their own Mohawk Friday Bakery. Food is also prepared for a variety of school events. Community resources and a college-level program are visited.

**223614**

**CULINARY ARTS IV**

TWO CREDIT COURSE (Full Year)

PREREQUISITE: CULINARY ARTS III

Grade of C or better

Culinary Arts IV is a year-long, project-based and independent study course that partners with an employer. Students plan menus, price/shop for ingredients and prepare/serve food for an off-campus, public venue. Students need to be self-directed learner and maintain communication with the off-campus personnel. This will require hours spent outside of the school day.

# **Industrial Technology**

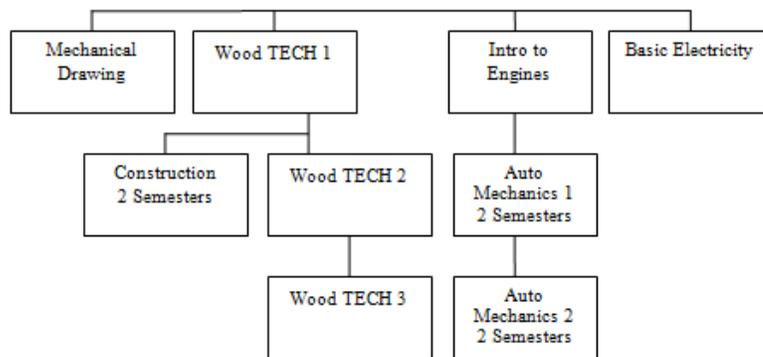
## **Dominant Career Pathways related to the M.C.H.S. Curriculum:**

- (1) Engineering**
- (2) Manufacturing**
- (3) Construction**
- (4) Transportation**

# Industrial Technology

Course Title	9	10	11	12	ONE SEMESTER	TWO SEMESTER	CREDIT	PREREQUISITE REQUIRED
Intro to Engines	X	X	X	X	X		1	NO
Auto Mechanics I		X	X	X		X	2	NO
Auto Mechanics II			X	X		X	2	YES
Wood Tech 1	X	X	X	X	X		1	NO
Wood Tech 2		X	X	X	X		1	YES
Wood Tech 3		X	X	X	X		1	YES
Construction		X	X	X		X	2	YES
Mechanical Drawing	X	X	X	X	X		1	NO
Basic Electricity		X	X	X	X		1	NO

## INDUSTRIAL TECHNOLOGY



# INDUSTRIAL TECHNOLOGY

264913

INTRODUCTION TO ENGINES

ONE CREDIT COURSE

This course offers an opportunity for students to acquire knowledge that will be used in the repair, operation and maintenance of small gasoline engines. The student has an opportunity to learn practical skills in a shop situation. This is also an excellent course for any student who hopes to increase their knowledge of how the automobile works and when preventative maintenance should be performed. The safe and accepted way to care for an automobile will be presented without relying upon detailed technical information. Mechanical ability is not necessary for successful completion of this course. Everyone who operates an automobile should consider enrolling in this course before graduation.

264931/264932

AUTO MECHANICS 1

TWO CREDIT COURSE

This course is designed to acquaint the students with the accepted professional procedures in maintenance and repair. The students will explore automotive repair techniques and perform a variety of preventative maintenance service procedures. The students will have a complete understanding of the functions of the component parts of an automobile and how to maintain them at the successful completion of this course. Students beginning to make choices about careers involving Automotive Technology will have had enough experiences to make an informed decision about their future.

**Successful completion of Auto Mechanics I with at least a “B” will allow enrollment in articulated courses at NIACC.**

**Successful completion of Auto Mechanics I with at least a “C” will allow enrollment in Auto Mechanics II.**

**Must have sophomore status or higher to enroll in Autos 1.**

264961/264962

AUTO MECHANICS 2

TWO CREDIT COURSE

PREREQUISITE: AUTO MECHANICS I

This course will provide the student with extended experiences in automotive maintenance and repair. The opportunity to work on mock-ups as well as live automobiles in the lab will increase the student's confidence in diagnosing specific problems and prepare him/her for a future in the automotive field.

**Successful completion of Auto Mechanics 1 with at least a C will allow enrollment in Auto Mechanics II.**

**Successful completion of Auto Mechanics I and Auto Mechanics II will provide an excellent background for any student wishing to enroll in a post-secondary Automotive Technology Program.**

**Successful completion of Auto Mechanics 2 with at least a “B” will allow enrollment in articulated courses at NIACC.**

**Students who complete Autos 2 with a “B” or better, will allow students the option to participate in Tech Prep NIACC Automotive Program.**

264523

WOOD TECH I

ONE CREDIT COURSE

This is an introduction to the construction and manufacturing processes of combining, separating, layout, shaping and conditioning applied to wood. Students will learn and apply personal safety and common safety procedures for the use of hand and power tools. They will also apply processes on personal projects in wood. Students will display skills of planning, problem solving, self-monitoring and working independently in an environment of shared resources. Students will be responsible for paying for their individual projects.

**264533**

**WOOD TECH 2**

ONE CREDIT COURSE  
PREREQUISITE: Wood TECH I  
SOPH OR ABOVE

Students will complete several small projects that are designed to increase their skill in woodworking. These include the use of the lathe and advanced wood joinery. Students will then develop an understanding of various divisions of labor as they investigate a mass production project. They will manufacture a product using industrial assembly procedures and apply workplace team skills. Students will display skills of planning, problem solving, self-monitoring and working as a team in an environment of shared resources. Students will be responsible for paying for their individual projects.

**264543**

**WOOD TECH 3**

ONE CREDIT COURSE  
PREREQUISITE: Wood TECH I&2

Students will build a project of their own choice and design. This will be an introduction to the principles of design as applied to a woodworking project. Students will complete pre-production steps of need identification, illustration, materials estimate, purchase and plan of procedure. Students will complete several small projects that are designed to increase their skill in woodworking. These include the use of the lathe and advanced wood joinery. Students will be responsible for paying for their individual projects.

**264971**

**CONSTRUCTION**

TWO CREDIT COURSE  
PREREQUISITE: WOODS I  
SOPH OR ABOVE

The class provides instruction in basic building procedures and techniques. Areas covered include building materials, rafter layout, framing and concrete work. The course provides students practical experience in the construction of small buildings and other projects. This course provides excellent experience for those who might someday work in construction or any occupation related to it.

**264768**

**BASIC ELECTRICITY**

ONE CREDIT COURSE  
PREREQUISITE: ALGEBRA I  
SOPH OR ABOVE

Have an interest in learning more about electricity? Plan to own your own home one day? Thinking about a technical career and taking courses offered at NIACC (e.g. automotive technician, diesel technician, industrial systems technician and wind power technician)?

This is a good introductory course to simple electrical circuits. Students with no previous experience will understand the effects of voltage, resistance and current in simple circuits. This is the foundation and starting point for many technical careers. Students will also learn how to safely construct circuits applied to residential wiring; an essential skill for today's homeowner.

**Must have sophomore status or higher and successfully complete Algebra I to enroll in Basic Electricity.**

**264913**

**INTRODUCTION TO ENGINES**

ONE CREDIT COURSE

Students will learn how to repair, operate and maintain small gasoline engines with the opportunity to apply practical skills in a shop situation. This is a good class for those who want to learn the basics of small engine maintenance and repair while increasing their mechanical ability.

**264931**

**AUTO MECHANICS 1**

TWO CREDIT COURSE

Students who own and/or operate an automobile should consider enrolling in this course. They will increase their knowledge of how an automobile works and when preventative maintenance should be performed. Students will learn how to extend the life of their automobile (save money) through its proper care. They will be introduced to professional procedures in auto maintenance and repair and have hands-on experience with automotive repair techniques. At the completion of the course, students will perform a variety of preventative maintenance procedures. They will have an understanding of the major components and functions of an automobile and how to maintain them. Students considering a career involving automotive technology will gain enough experiences to make an informed decision about their career

and future.

**Successful completion of Auto Mechanics 1 with at least a “B” will allow enrollment in articulated courses at NIACC.**

**Successful completion of Auto Mechanics 1 with at least a “C” will allow enrollment in Auto Mechanics 2**

**Must have sophomore status or higher to enroll in Autos 1.**

**264961**

**AUTO MECHANICS 2**

**TWO CREDIT COURSE**

Students will build on what they learned in Auto Mechanics 1 and learn more advanced automotive maintenance and repair techniques. They will have the opportunity to work in the autos lab on both live and mock-up automobiles and major components. As a result, students will have the confidence and knowledge to diagnose automotive problems. This will help prepare students for their automotive technology career/future or to become a smart consumer of auto repair services.

**Successful completion of Auto Mechanics 1 with at least a C will allow enrollment in Auto Mechanics 2.**

**Successful completion of Auto Mechanics 1 and Auto Mechanics 2 will provide an excellent background for any student wishing to enroll in a post-secondary Automotive Technology Program.**

**Successful completion of Auto Mechanics 2 with at least a “B” will allow enrollment in articulated courses at NIACC.**

**Students who complete Autos 2 with a “B” or better, will allow students the option to participate in Tech Prep NIACC Automotive Program.**

**264623**

**MECHANICAL DRAWING**

**ONE CREDIT COURSE**

Students will learn basic drafting procedures and apply these principles through the use of drafting equipment. They will understand and create drawings using various drafting drawing styles. Students will learn to apply spatial relationships and visualization techniques to create 2D and 3D drawings and CAD sketches. They will learn how to transfer their drawing from paper to computer to machine to create a physical reproduction of their drawing. Students will have access to industry-standard equipment and programs for this project including MasterCam, laser engraver, three-axis CNC mill, five-axis robotic arm normally used in manufacturing and/or 3D printer. At the successful completion, students will learn and apply skills and techniques necessary to complete drafting projects. Computer drawing programs will be used for half of the class.

# **Instrumental/ Vocal Music**

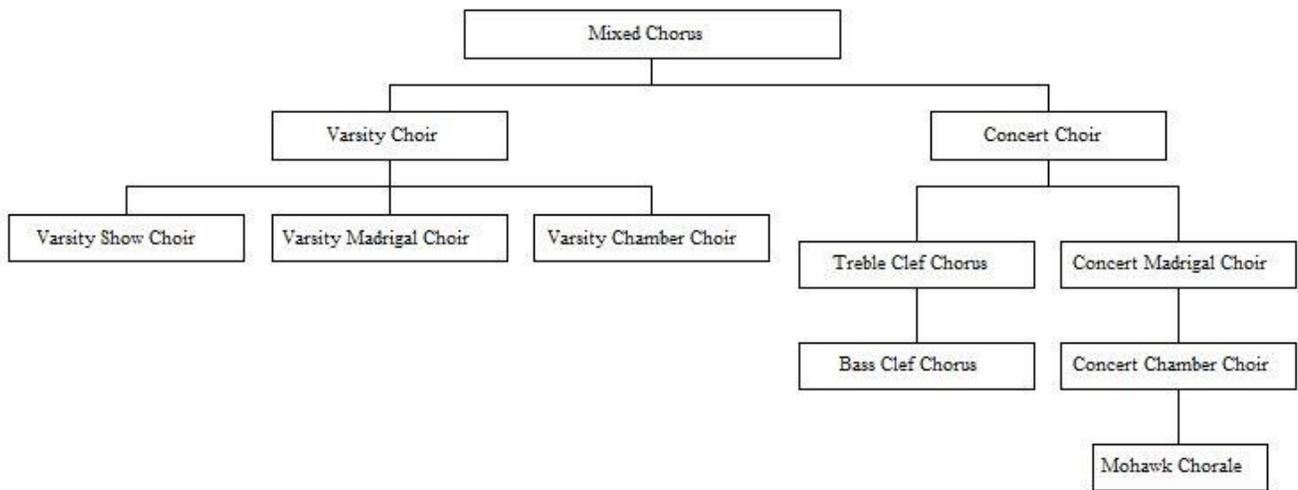
**Dominant Career Pathways  
related to the M.C.H.S.  
Curriculum:**

- (1) Arts and Communications**

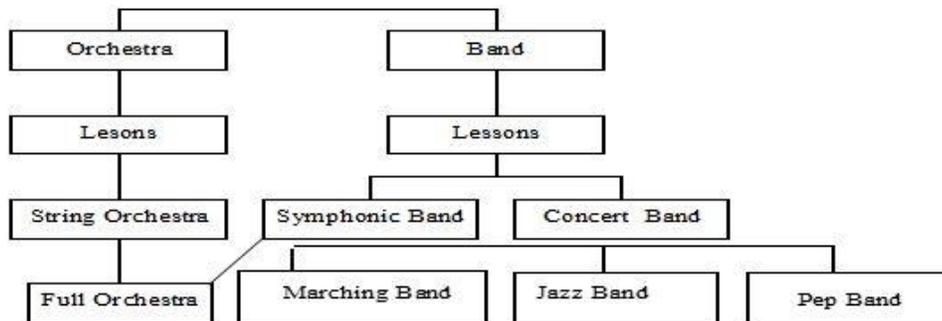
# MUSIC DEPARTMENT

Course Title	9	10	11	12	ONE SEMESTER	TWO SEMESTER	CREDIT	PREREQUISITE REQUIRED
Instrumental Music	X	X	X	X		X	X	X
Vocal Music	X	X	X	X		X	X	

## VOCAL MUSIC



## INSTRUMENTAL MUSIC



## INSTRUMENTAL/VOCAL MUSIC

405281/405282

ORCHESTRA

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE  
PREREQUISITE: PARTICIPATION IN MIDDLE  
SCHOOL ORCHESTRA OR PERMISSION OF  
INSTRUCTOR

The MCHS orchestra program provides for the study of music in various forms and styles for qualified string players. The string orchestra uses musical performance as a vehicle to refine the skills of tone production, technique development, rhythm, intonation, bowing, ensemble playing, and musicianship. A variety of literature from different styles and periods of music history will be studied and performed. This ensemble performs a public concert each quarter, as well as opportunities to audition for the All-State Orchestra, participate in the IHSMA Solo and Ensemble Festival, plus other special clinic and festival events.

Group lessons are a course expectation and scheduled on a rotating basis throughout the school year. Regular and punctual attendance is required for maintaining membership in all performing ensembles.

405261/405262

BAND

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE  
PREREQUISITE: PARTICIPATION IN MIDDLE  
SCHOOL BAND OR PERMISSION OF INSTRUCTOR

The MCHS band program provides for the study of music in various forms and styles for qualified instrumentalists. Comprised of all members of the band program, the marching band season starts with an annual pre-season band camp held for five days during August. The "**Marching Mohawks**" function during the first quarter and briefly during the fourth quarter in preparation for participation in the North Iowa Band Festival Parade. The marching band meets daily during first period and for one and one half hours each Monday evening. This popular group within the community represents the Mason City Mohawks at all home football games.

Concert bands are the core of the program and begin during the month of October in conjunction with the end of the marching season. The **Symphonic Band** (select ensemble) and the **Concert Band** use musical performances as a vehicle to refine the skills of tone production, technique development, rhythm, intonation, ensemble playing, and musicianship. A variety of literature from different styles and periods of music history will be studied and performed. Both ensembles perform a public concert each quarter, as well as opportunities to audition for the All-State Band, participate in the IHSMA Solo and Ensemble Festival plus other special clinic and festival events.

Group lessons are a course expectation and scheduled on a rotating basis throughout the school year. Additionally, Symphonic Band Wind and Percussion sectionals meet once each week before school. Regular and punctual attendance is required for maintaining membership in all performing ensembles.

The following ensembles are available for participation by members of the band program.

JAZZ Band I  
JAZZ Band II  
Mohawk Power - (pep band)

405331/405332

MIXED CHORUS

ONE-HALF CREDIT PER SEMESTER  
ONE CREDIT COURSE

Membership in the Mixed Chorus is open to all 9<sup>th</sup> – 12<sup>th</sup> grade students. Mixed Chorus meets every other day for one period, on either the A or B day of the cycle opposite of P.E. (P.E. is only offered every other day for a full year as a special class of Mixed Chorus students). Mixed Chorus is a one credit class for a full school year. Three performances outside of the school day are required to pass the class. Class and private vocal lessons are offered subject to availability.

**405401/405402**

**VARSITY CHOIR**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE

Varsity Choir is an auditioned group of sophomore, junior and senior students. Membership may be revoked by the instructor due to a lack of work ethic. Several ensembles, including the Varsity Show Choir, Chamber Choir and Madrigal Choir are open to students by audition. Varsity Choir meets daily as a two credit class for a full school year. Four performances outside of the school day are required to pass the class. Class and private vocal lessons are offered subject to availability.

**405361/405362**

**CONCERT CHOIR**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE

Members of the Concert Choir are juniors and seniors selected by audition. Class/private voice lessons are required a minimum of four times per quarter to pass the course. These lessons will be arranged according to the student schedule and are free of charge. Performance schedule includes three concerts, Follies, State Contest and other arranged appearances. The Concert Choir tours to national competitions and festivals every year. All tour expenses are the responsibility of the student and can be covered with fund raising opportunities. Various small performing ensembles are chosen from choir personnel including the Mohawk Chorale, Chamber Singers, and Madrigal Choir. Concert Choir meets daily for one period as a two credit class for a full school year.

# **Language Arts**

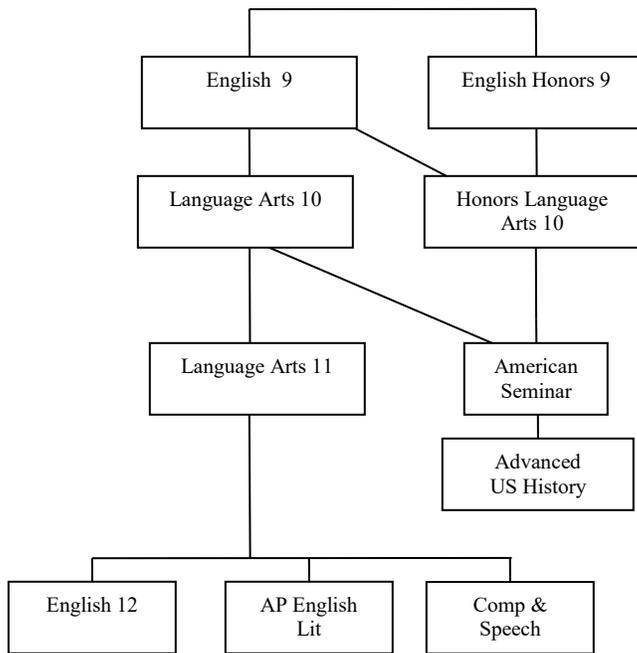
## **Dominant Career Pathways related to the M.C.H.S. Curriculum:**

- (1) Arts and Communication**
- (2) Business/Information  
Management/Marketing**
- (3) Family and Human Services**

# LANGUAGE ARTS DEPARTMENT

Course Title	9	10	11	12	ONE SEMESTER	TWO SEMESTER	CREDIT	PREREQUISITE REQUIRED
English 9	X					X	2	NO
Honors English 9	X					X	2	NO
Language Arts 10		X				X	2	NO
Honors Language Arts 10		X				X	2	NO
Language Arts 11			X	X		X	2	NO
AP English Lit				X		X	2	NO
American Seminar			X	X		X	2	NO
English 12				X		X	2	NO

# Language Arts



## LANGUAGE ARTS

Eight credits in English must be completed for graduation. Two of those credits will be earned in one of the English 9 choices.

**100071/100072**

**ENGLISH 9**

**TWO CREDIT COURSE**

English 9 is a two-semester, two-credit course that meets the English requirement for all freshmen. Students will engage in a variety of learning activities that adhere to the four district standards of reading, writing, speaking, and listening development. This course provides students with instruction and practice in composing descriptive, narrative, and expository texts. The rules of correct punctuation, usage, improving sentence structure, word choice, style, and voice are reviewed and practiced. In addition, students will gain competency and confidence in oral communication skills. The six traits of reading are reviewed and reinforced with activities such as Sustained Silent Reading.

**100081/100082**

**HONORS ENGLISH 9**

**TWO CREDIT COURSE**

Ninth Grade Literature is a rigorous introduction to English language arts skills necessary to succeed at the high school level. Students will focus on the power of the individual in society through the study of advanced American and world literature. Students will also develop critical techniques for reading comprehension, literature analysis, and discussion of complex ideas. Students wrestle with a variety of non-fiction and fiction, and learn how to argue ideas in five-paragraph essays using evidence. A summer assignment maybe required.

**100411/100412**

**LANGUAGE ARTS 11**

**ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE**

Language Arts 11 is intended to provide reading and writing experiences and instruction to engage all learners. It is also an intention of this course to allow students to think critically about and become engaged with a variety of texts while developing life-long literacy skills. The reading selections are by American authors; students are required to read novels, short stories, and dramas. In addition, students read and analyze articles from magazines, newspapers, and electronic media. The writing of this course requires students to write using several modes, including reflective writing, essay writing, research and argumentation. The emphasis will be placed on American literary tradition from the Colonial period to the postmodern authors.

**100581/100582**

**AP ENGLISH LIT**

**TWO CREDIT COURSE  
ONE CREDIT PER SEMESTER  
12<sup>th</sup> GRADE**

Advanced English is a rigorous, two-semester course designed to prepare the college bound senior for college level English courses and the Advanced Placement (AP) English Literature & Composition examination. The class focuses on helping students perfect their analytical reading & writing skills, as well as fine tuning their overall communication skills. Students analyze a variety of literary works ranging from poetry, to drama, to short story, to full-length novels. Students write many in-class essays and writing assignments to hone writing under time constraints. Students write reflectively to further the writing process and prepare for in-class discussion. Students are expected to work independently and collaboratively on a variety of projects throughout the year.

**100241**

**LANGUAGE ARTS 10**

**ONE CREDIT COURSE**

This course is a two semester class that meets the Language arts requirement for sophomore students. An integrated approach to the language arts is used in designing learning opportunities to enhance all modes of communication appropriate for both career and college situations.

**100261**

**LANGUAGE ARTS 10 HONORS**

**ONE CREDIT COURSE**

This course is a two semester class that meets the Language arts requirement for sophomore students. An integrated approach to the language arts is used in designing learning opportunities to enhance all modes of communication appropriate for both career and college situations.

**141773**

**AMERICAN STUDIES**

4 CREDIT BLOCK

**AMERICAN SEMINAR**

1 CREDIT PER SEMESTER  
2 CREDIT COURSE

**ADVANCED US HISTORY**

1 CREDIT PER SEMESTER  
2 CREDIT COURSE

The Advanced American Studies course is a team taught, blocked course incorporating the study of United States history and literature. The course will emphasize the analytical skills and factual knowledge necessary to deal critically with the problems and issues in United States history and the literature generated during the periods studied. The course is organized in chronological order and will make academic demands of students to weigh evidence and interpretations presented in historical scholarship and literature. Writing will consist of students learning how to best find their voice as they present evidence clearly and persuasively and will utilize the skills necessary to arrive at conclusions on the basis of informed judgment. This course will last 2 class periods in a block schedule and infuse AP US History and Advanced American Seminar. Extra meeting time may be scheduled outside of the learning day to prepare for the AP History Exam.

Students taking the Advanced Placement exam in United States history will have the AP designation added to their transcript if they score a 3 or better.

**100426**

**ENGLISH 12**

1 CREDIT PER SEMESTER  
2 CREDIT COURSE

English 12 (or Language Arts 12) is a two-semester general education required class meeting the requirements of the Common Core Standards. The work involves analyses of classic world literature and informational texts, as well as writing, speaking and listening.

# **Mathematics**

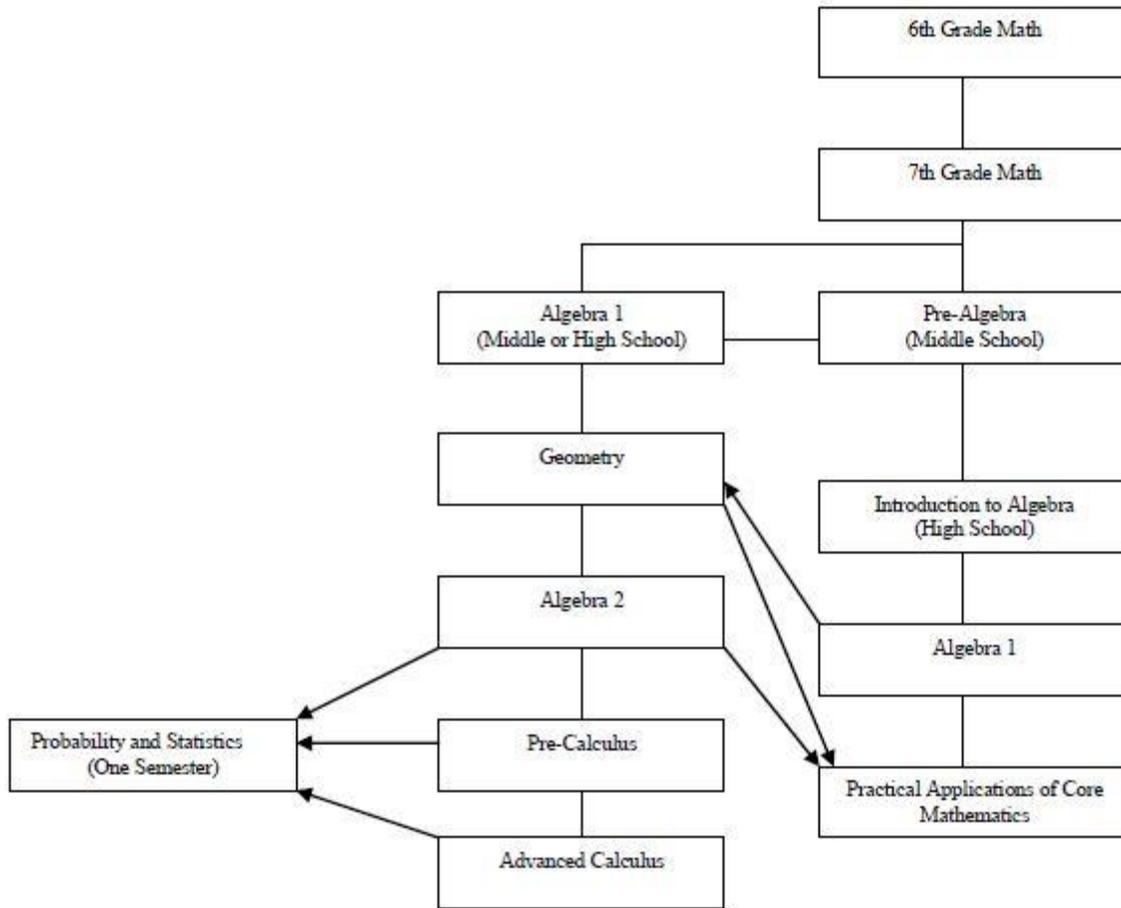
## **Dominant Career Pathways related to the M.C.H.S. Curriculum:**

- (1) Engineering/Industrial/  
Technological Sciences**
- (2) Business/Information  
Management/Marketing**
- (3) Health Sciences**

# Mathematics

<b>COURSE TITLE</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>ONE SEMESTER</b>	<b>TWO SEMESTERS</b>	<b>CREDIT</b>	<b>PREREQUISITE REQUIRED</b>
Algebra 1	X	X	X			X	2	YES
Geometry	X	X	X	X		X	2	YES
Algebra 2	X	X	X	X		X	2	YES
Practical Applications of Core Mathematics			X	X		X	2	YES
Probability and Statistics		X	X	X	X		1	YES
Pre-Calculus		X	X	X		X	2	YES
Advanced Calculus			X	X		X	2	YES

## Mathematics



## MATHEMATICS

Six credits of mathematics must be earned at Mason City High School. Each credit is a passing grade for a semester's work in any math course. It is recommended that students become familiar with the mathematics necessary for their interest areas early in their high school career so that the required courses can be taken in the proper sequence.

Most colleges and universities require that students have at least two years of algebra (Algebra 1 and 2) and one year of geometry in high school. A semester course like Probability and Statistics can be taken while taking other math courses.

The following math standards and benchmarks are addressed in the Mathematics Department's course offerings:

The learner will apply the concepts of numbers and quality.

The learner will apply the concepts of functions.

The learner will apply concepts of modeling.

The learner will apply concepts of algebra.

The learner will apply the concepts of geometry.

The learner will apply the concepts of probability and statistics.

**162131/162132**

**ALGEBRA 1**

ONE CREDIT PER SEMESTER  
TWO SEMESTER COURSE  
PREREQUISITE: INTRO TO ALGEBRA PRE-ALGEBRA  
OR DEPT APPROVAL

Algebra 1 includes the study variable expressions, functions and relationships, solving variable equations, graphing techniques, solving systems of equations and inequalities, applications of lines, polynomial operations, and quadratic functions and equations.

**162151/162152**

**GEOMETRY**

ONE CREDIT PER SEMESTER  
TWO SEMESTER COURSE  
PREREQUISITE: ALGEBRA 1

This course emphasizes properties and relationships of points, lines, planes and solids. Topics studied are: symmetry, modeling techniques, the structure of geometry, basic definitions, postulates, theorems, proof, angles and parallel lines, triangles, quadrilaterals, other polygons, polyhedrons, the Pythagorean Theorem, similarity and congruence, circles and spheres, area, surface area, volume, transformations, and simple trigonometry. The probability of success is greatly increased if the student has maintained a C or above in the previous course.

**162141/162142**

**ALGEBRA 2**

ONE CREDIT PER SEMESTER  
TWO SEMESTER COURSE  
PREREQUISITE: GEOMETRY  
C IN GEOMETRY AND ALGEBRA 1 OR DEPT APPROVAL

Algebra 2 reviews and builds upon the concepts of Algebra 1 and Geometry. Topics of study are: advanced polynomial manipulations, rational expressions and equations, polynomial functions, quadratic relationships and their applications, exponential and logarithmic functions, basic statistics, and an introduction to trigonometry including the unit circle. Use of a graphing calculator is required throughout this text. The probability of success is greatly increased if the student has maintained a C or above in the previous course.

**162263 PRACTICAL APPLICATIONS OF CORE MATHEMATICS**

TWO CREDIT COURSE  
PREREQUISITE: THREE MATH CREDITS  
JUNIORS AND SENIORS ONLY

This two semester course is designed to develop advanced math skills necessary for success in college mathematics courses. The scope and sequence of this course is both wide ranging and deep in terms of the topics being investigated.

First semester is designed to give the student experience in solving everyday math problems. Material covered includes a review of basic math skills, practical applications involving comparison/discount buying, interest, kinds of averages, bank statements and check books, managing money, credit buying, graph reading, owning a home, buying a car, and insurance. Computer usage will be a regular part of the course. Emphasis is given to spreadsheets to analyze and solve real world problems.

Second semester topics included in this course include solving, graphing and applications of both linear and quadratic functions. This course will also investigate topics such as trigonometry and logarithmic functions as well as statistics and data analysis along with their applications to the real world. Special emphasis will be placed on problem solving skills required to be successful in college mathematics.

This course is intended for junior or senior students who

- 1) have taken but have not earned a C or better in Geometry
- or 2) have taken but have not earned a C or better in Algebra 2
- or 3) have not taken Algebra 2

**162313                    PROBABILITY AND STATISTICS**

ONE CREDIT COURSE  
PREREQUISITE: GEOMETRY  
**C IN ALGEBRA 2 OR DEPT APPROVAL**

This one semester course studies percentile ranks, measures of central tendency (averages), variability, basic probability, permutations, combinations, rules of probability, probability distributions, normal distributions, correlation, and methods of statistical sampling. Emphasis is on the interpretation of graphs, the validity of sampling procedures, concepts of probability, and classifying and analyzing data. Graphing calculators are used throughout the course as well as spreadsheets to analyze data and determine solutions. A statistics course is often now required in many colleges for most majors.

**162411/162412                    PRE-CALCULUS**

ONE CREDIT PER SEMESTER  
TWO SEMESTER COURSE  
PREREQUISITE: ALGEBRA 2  
**C IN ALGEBRA 2 OR DEPT APPROVAL**

Pre-Calculus continues the study of algebra while integrating the concepts of geometry. Topics of study are: graphing and solving functions, polynomial functions, rational functions, exponential and logarithmic functions, trigonometry functions, analytic trigonometry, applications of trigonometry, parametric and polar equations, matrix systems, and sequences and series. Concepts are studied numerically, graphically, and analytically. The graphing calculator is used extensively in this course. There is also an emphasis on problems that use the concepts in real life. The probability of success is greatly increased if the student has maintained a C or above in the previous course.

**162431/162432                    AP CALCULUS**

ONE CREDIT PER SEMESTER  
TWO SEMESTER COURSE  
PREREQUISITE: PRE-CALCULUS  
**C IN PRE-CALCULUS OR DEPT APPROVAL**

Calculus makes extensive use of the trigonometry and advanced algebra skills taught in Pre-Calculus. These skills are reinforced and used to study differential calculus as well as integral calculus. Extensive use of computer programs and the graphing calculator help the students visualize and practice these calculus concepts. A college level Calculus and Analytic Geometry book is used. Problem solving strategies and critical thinking skills are stressed throughout the course. The probability of success is greatly increased if the student has maintained a C or above in the previous course.

By the end of this course, students will have studied all of Calculus I and much of Calculus II.

# **Modern Language**

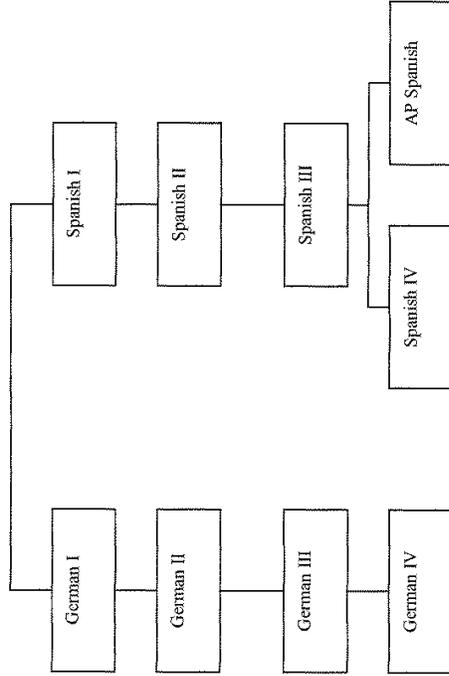
## **Dominant Career Pathways related to the M.C.H.S. Curriculum:**

- (1) Arts and Communications**
- (2) Business/Information  
Management/Marketing**
- (3) Engineering**
- (4) IT**

# Modern Language

<b>COURSE</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>ONE SEMESTER</b>	<b>TWO SEMESTER</b>	<b>CREDIT</b>	<b>PREREQUISIT REQUIRED</b>
Spanish I	X	X	X			X	2	NO
Spanish II		X	X	X		X	2	YES
Spanish III			X	X		X	2	YES
Spanish IV				X		X	2	YES
AP Spanish				X		X	2	YES
German I	X	X	X			X	2	NO
German II		X	X	X		X	2	YES
German III			X	X		X	2	YES
German IV				X		X	2	YES

# Modern Languages



# MODERN LANGUAGE

*"Through learning language, we learn about culture. Through learning cultures, we learn tolerance and respect for others. Through learning tolerance and respect for others, we work toward peace." Author Unknown*

Communicating in other languages and understanding both the culture and the people within them, can open doors for you in your present and future, both personally and professionally. Language study can take you in endless directions and often, without leaving your hometown.

Fluency in another language is an exceptional asset for many current careers and ones not yet created. Efficient transportation systems and the Internet have brought the world to our doorsteps. Students who study languages are prepared to meet these exciting developments head on. The future belongs to those who recognize the opportunities present through strong connections with all corners of the world.

At Mason City High School, the outcomes for both languages are the following: The learner will communicate using the target language in a variety of situations and demonstrate understanding of the speakers of the target language.

Completion of four years of foreign language could lead towards college credit without taking the college courses. For a small fee, a test can be taken prior to the beginning of the first college semester. Depending on the college and the score of the test, credit may be awarded towards college graduation. Four years of a language at this level usually covers most college program requirements. Therefore continued language study in high school can save in college tuition expenses.

**121121/121122**

**SPANISH 1**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE

This is the first course in learning to speak, read, write and understand Spanish and the cultures of the people who speak Spanish. Much of the class work is oral, as a heavy emphasis is placed on communicative functioning in the language. You will also learn to write, listen, and read in Spanish. Your vocabulary will grow daily and by year's end you'll have the tools to speak and understand in common daily situations. Advanced reading and writing skills will be developed in the upper years of language study, and oral participation is required at all levels. This class is recommended for incoming freshmen with a GPA of 3.0 or higher. It is also recommended for all sophomores, juniors, and seniors with good study habits. Honors Spanish 1 is an option.

**Students must have a C or higher or teacher approval to continue to the next level.**

See 'Spanish Honors Class Opportunity & Requirements' section.

**121141/121142**

**SPANISH 2**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE  
PREREQUISITE: C IN SPANISH 1

This course is a continuation of Spanish I. Emphasis is on expanding your vocabulary and grammatical concepts with real-life situations, like ordering in a restaurant and getting around town. You become more comfortable in expressing yourself in Spanish, and begin to work with the different tenses. Oral participation, individual and group work are expectations of Spanish 2 students. Honors Spanish 2 is an option.

**Students must have a C or higher or teacher approval to continue to the next level.**

See 'Spanish Honors Class Opportunity & Requirements' section.

**121161/121162**

**SPANISH 3**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE  
PREREQUISITE: C IN SPANISH 2

This course will continue to focus on vocabulary acquisition and grammar application, with an emphasis on Spanish verb tenses. You will communicate in the past, present, and future with themes like travel, sports and daily routine. As in all language levels, oral participation is extremely important.

**Students must have a C or higher or teacher approval to continue to the next level.**  
See 'Spanish Honors Class Opportunity & Requirements' section.

## **Spanish Honors Class Opportunity & Requirements**

All Spanish students will be offered the opportunity to receive Honors credit for Spanish 1, 2 & 3. In addition to completing normal class assignments, Honors students will learn extra vocabulary and complete additional cultural projects to expand their knowledge of the Spanish speaking world. Spanish Honors students should be self-motivated, independent learners, who are capable of learning at a faster pace. In addition to learning more Spanish, completing the Honors curriculum will make students more knowledgeable world citizens in our increasingly diverse society. It will also make students better prepared to excel in the Advanced Spanish 4 class if they choose to take it; although participation in Honors Spanish 1-3 is not a prerequisite for Advanced Spanish 4. To receive the honors credit for the courses, students must have a least an 80% at the end of the semester (including the extra vocabulary and project assignments).

**121181/121182**

**SPANISH 4**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE  
PREREQUISITE: C IN SPANISH 3

Spanish 4 will be very similar in pace and class style as Spanish 1-3, focusing on learning vocabulary and grammar. You will complete your four years of Spanish by building on and completing topics introduced in previous years, such as telling stories in the past using both past tenses, giving commands to a variety of people in cooking/restaurant situations, and discussing future plans after graduation. Students who successfully complete Spanish 4 should be able to enter college programs at the intermediate level, testing out of two or three semesters.

Similar to pacing to Spanish 1-3, this class will cover about half of the content as compared to Advanced Spanish 4. In this class, students should expect similar study and test expectations as Spanish 3. Please talk with your Spanish 3 teacher and the Spanish 4 teacher if you are unsure whether you should take Advanced Spanish 4 or normal Spanish 4.

**121201/121202**

**ADV. SPANISH 4**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE  
PREREQUISITE: C IN SPANISH 3

Should you take Advanced Spanish 4? Do you like Spanish and want to learn more? Have Spanish classes for the most part been easy for you? Do you want a challenge and a faster pace (twice as fast as Spanish 1-4)? Do you want to speak mainly Spanish in class? Can you learn vocabulary quickly and/or do you have time to study most days? Are you considering continuing with Spanish in college? If you answered "sí" to the previous questions, then this is the class for you!

The goals of the class are: 1) to enjoy studying Spanish with other top students who love learning the language; 2) to complete your study of basic grammar and vocabulary, and 3) to prepare you for intermediate/advanced study in college and/or CLEP/AP tests. Emphasis will be placed on building your Spanish comprehension and communication abilities, while doubling your vocabulary knowledge and developing your competence in all verb tenses. We will finish the text book in the first three quarters of the year (two weeks per chapter, study required daily, and testing every Friday), and spend quarter 4 working on cultural or college level material. Students who successfully complete Advanced Spanish 4 should be able to enter college programs at the intermediate level, testing out of three or four semesters.

Please talk with your Spanish 3 teacher and the Spanish 4 teacher if you are unsure whether you should take Advanced Spanish 4 or normal Spanish 4.

**121321/121322**

**GERMAN 1**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE

Why German? Why not? German speaking countries have a vast number of connections and cooperation with the United States. Many learn German for their heritage, however, German speakers are sought out in the pharmaceutical, publishing and engineering industries, to name just a few. If you are interested in languages, music, sciences or mathematics, German is for you.

This is a beginning course in learning German. Functioning in German is emphasized throughout the levels, by reading, writing, speaking, listening and culture. The students will explore the German culture through various mediums and activities. A variety of materials will be used for learning vocabulary and grammar. Level one focuses on the topic we know best, ourselves. We will also begin the process of comparing our lives to that of people in the German cultures in order to promote personal growth.

**Students must have a C or higher or teacher approval to continue to the next level.**

Honors German 1 is an option. See 'Honors German' section.

**121341/121342**

**GERMAN 2**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE  
PREREQUISITE: C IN GERMAN 1

This is a continuation of Level one. The learning activities are similar to those of the beginning course. German one grammar and vocabulary will be reviewed. Many materials will again be used. There will be more speaking and writing in this level.

**Students must have a C or higher or teacher approval to continue to the next level.**

**121361/121362**

**GERMAN 3**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE  
PREREQUISITE: C IN GERMAN 2

This year begins the evolution of German study. Grammar and vocabulary from levels one and two are refined and supplemented, offering greater variety and flexibility. In addition, new information is continually added. From the basics we begin to build a broader base of language to use in all forms of communication.

**Students must have a C or higher or teacher approval to continue to the next level.**

**121381/121382**

**GERMAN 4**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE  
PREREQUISITE: C IN GERMAN 3

In level four we continue to refine skills learned in previous years and build on them. Authentic materials are incorporated when possible to maximize exposure to and understanding of the German cultures and language. Level four also examines WWII from several perspectives. Areas included are reading, speaking, writing and culture, as always.

### **Honors German**

Students who take this option will complete normal class assignments, learn additional vocabulary and create cultural projects to enhance their learning. To receive this credit, students must have at least 80% at the end of the semester.

# **Physical Education & Health**

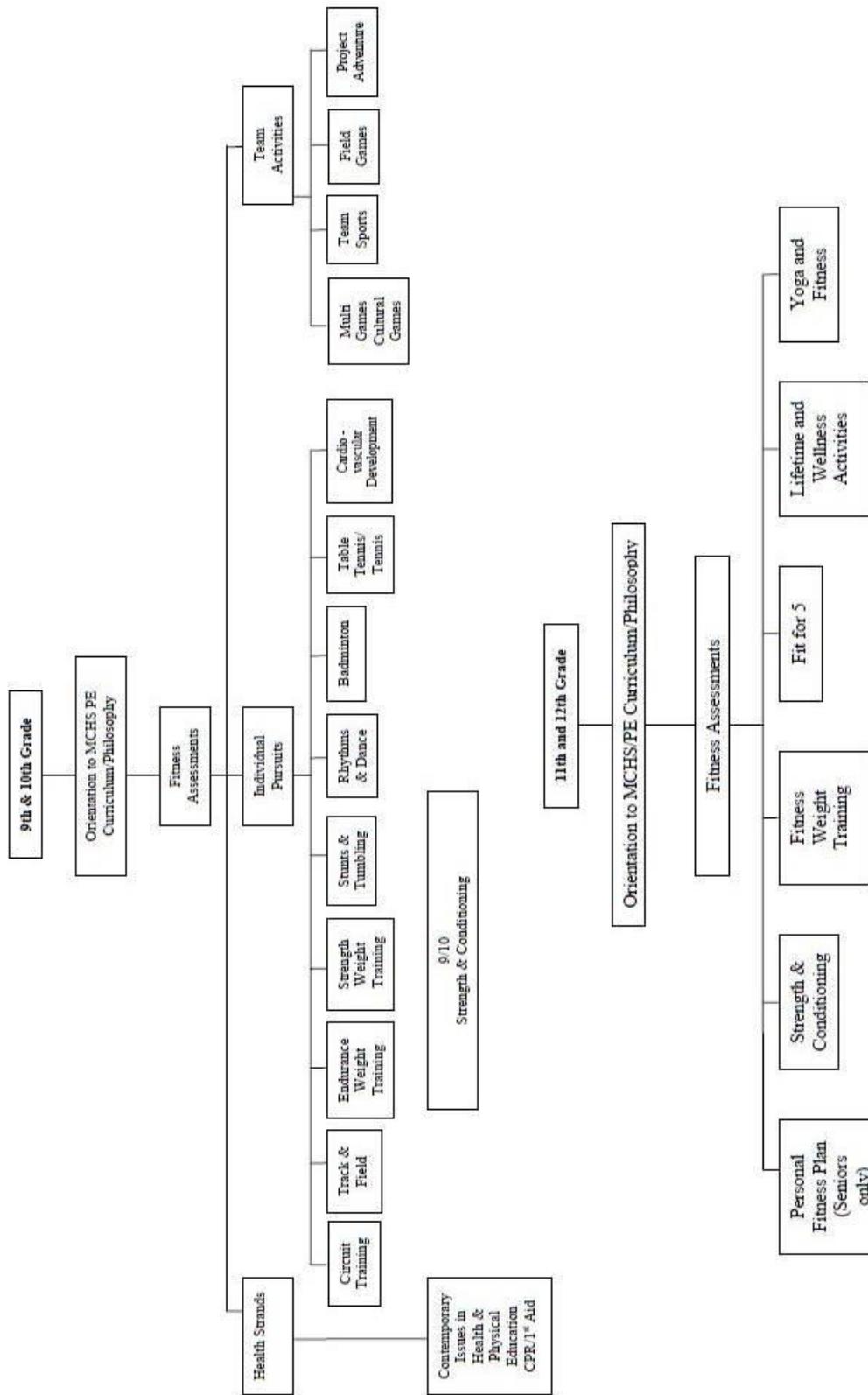
## **Dominant Career Pathways related to the M.C.H.S. Curriculum:**

- (1) Health Sciences**
- (2) Agriscience and Natural Resources**

# Physical Education

	9	10	11	12	ONE SEMESTER	TWO SEMESTER	CREDIT	REQUIRED PREREQUISITE
9 PE	X					X	1	
9/10 PE	X	X			X		1	
Strength & Conditioning 9/10	X	X			X		1	
Strength & Conditioning 11/12			X	X	X		1	
Lifetime and Wellness Activities			X	X	X		1	
Fit for 5			X	X	X		1	
Yoga and Fitness			X	X	X		1	
Quick Time PE			X	X	X		1	
PFP				X	X		1	
Personal Health	X	X	X	X	X		1	NO
Public Health	X	X	X	X	X		1	NO

# Physical Education



## PHYSICAL EDUCATION

Each student is required to enroll and participate in Physical Education one semester per year of his/her enrollment in school. Students must successfully complete a minimum of four credits (four semesters) of physical education. All students are required to complete health related fitness assessments in each physical education class. Students may be excused from physical education if they present a written statement from a doctor stating that such activities could be injurious to their health or they have been exempted because of a conflict with religious beliefs. Students in grades 11-12 may also be excused from physical education courses if they are:

- actively involved in an athletic program, and have obtained a physical education exemption waiver.

Physical education at Mason City High School provides students with the opportunity to develop the skills necessary to lead a healthy lifestyle.

**285021/285022**                      **9 PE**                                       $\frac{1}{2}$  CREDIT PER SEMESTER  
(ENROLLED IN CHOIR)                                      TWO SEMESTER COURSE

Physical Education units may include: endurance and strength weight training, circuit training, fitness walking/track and field, aerobic exercise, pickle ball, badminton, multi games/cultural games, project adventure, team sports and field games, endurance and strength weight training, circuit training, tennis, badminton, multi/games, track and field, and cardiovascular endurance/walking. The focus of 9th grade Physical Education is to offer a variety of experiences to allow opportunities for personal growth.

**285023**                                      **9-10 PE**                                      ONE CREDIT PER SEMESTER

Freshman/Sophomore Physical Education units may include: endurance and strength weight training, circuit training, circuit training, rhythms and dance, stunts and tumbling, table tennis and tennis, multi games/cultural games, team sports and field games, endurance and strength weight training, circuit training, tennis, badminton, multi/games, track and field, project adventure and cardiovascular endurance/walking. The focus of 9th and 10th grade Physical Education is to offer a variety of experiences to allow opportunities for personal growth.

**285033**                                      **STRENGTH & CONDITIONING 9/10**                                      ONE CREDIT PER SEMESTER  
(SOPHOMORE ONLY ELECTIVE)

This advanced weight training course will feature a highly structured training program comparable to the junior/senior level course. The course will be based on components of skill-related fitness of coordination, balance, agility, power, speed & reaction time.

### JUNIOR SENIOR PHYSICAL EDUCATION

**285253**                                      **STRENGTH & CONDITIONING 11/12**                                      ONE CREDIT COURSE

This course is an accelerated, pre-designed training program that will challenge students to work at a high level of intensity. The course will be based on the components of skill-related fitness – coordination, balance, agility, power, speed, and reaction time. The course is open to all students, but highly recommended for a student who is interested in improving athletic performance through weight training, fitness, and conditioning.

**285183**                                      **LIFETIME AND WELLNESS ACTIVITIES**                                      ONE CREDIT COURSE

Lifetime wellness activities: Students will be active participants in activities geared toward lifelong wellness. A strong focus will be on racquet and paddle activities such as tennis, badminton and table tennis, along with an emphasis on team sports such as basketball, volleyball and softball. These activities will be accompanied by additional recreational and fitness development activities.

**285203**

**FIT FOR 5**

**ONE CREDIT COURSE**

Students will be involved in activities such as fitness walking, jogging/running, cardio circuit training and other activities that enhance cardio-vascular fitness. The five health related components of fitness are emphasized. Concepts of cardio-vascular development will be taught and special attention will be given to developing the understanding of how to train for and the opportunity to participate in an organized event such as a 5k as a culminating course activity.

**285243**

**YOGA AND FITNESS**

**ONE CREDIT COURSE**

This Junior/Senior level Physical Education course will be based on the principle of allowing students the opportunity to experience improved strength, flexibility, balance and posture through a variety of movement forms such as yoga, aerobic activities and resistance training.

**285223**

**PERSONAL FITNESS PLAN**

**ONE CREDIT COURSE  
(SENIORS ONLY ELECTIVE)**

**Prerequisite – must have had a B or higher in any previous High School Physical Education Course, must have completed 3 years of Physical Education prior to enrolling in PFP as a senior. Students must have senior status prior to start of school year to enroll in PFP.**

The personal fitness plan course has been designed to provide an alternative approach to the traditional physical education curriculum for eligible senior students at MCHS. It requires students to be self-directed as they create and carry out an individual plan for fitness. Students will be required to exercise and maintain a journal that documents their progress and daily activity. Outside research and supplemental assignments are also requirements of the program.

**285263**

**QUICK TIME PE**

**ONE CREDIT COURSE**

Quick Time PE is an offering only for students who have full schedules both semesters of the school year. The class meets with the PE Staff before the start of the regular school day. Students create individual fitness programs, workout outside of the school day in addition to scheduled in class workouts, journal their workouts and complete supplemental course related assignments.

**223851**

**PERSONAL HEALTH**

**ONE CREDIT COURSE**

Personal Health class is an introduction to Health Literacy that focuses on decisions and behaviors that affect a person's health and wellness. Application of Health Literacy will focus on individual health choices. Topics include: Health Skills, Personal Care, Physical Activity for Life, Nutrition and Body Composition, Mental and Emotional Health, Safe and Healthy Relationships, and drug and alcohol prevention. This class is recommended for all students.

**223852**

**PUBLIC HEALTH**

**ONE CREDIT COURSE**

Public Health class examines current health issues that affect society on a local, state, national, and world level. The role of public health and services provided are studied. Public Health focuses on prolonging life and promoting health for a population through the organized efforts of individuals and organizations. Topics include: health organizations, health policy, human growth and development, health related occupations, diseases and disorders, health and safety standards, health consumer blues, environmental health, and current public health issues.

# Science

## **Dominant Career Pathways related to the M.C.H.S. Curriculum:**

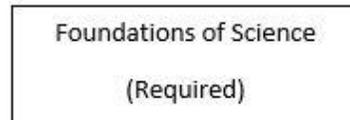
- (1) Engineering/Industrial/  
Technological Sciences**
- (2) Health Sciences**
- (3) Agriscience and Natural Resources**

# SCIENCE

Course Title	9	10	11	12	ONE SEMESTER	TWO SEMESTER	CREDIT	PREREQUISITE REQUIRED
Foundations of Science 9	X					X	2	NO
Biology	X	X				X	2	NO
Advanced Biology			X	X		X	2	YES
Environmental Science			X	X		X	2	YES
Physics		X	X	X		X	2	YES
Advanced Physics			X	X		X	2	YES
Chemistry		X	X	X		X	2	YES
General Chemistry			X	X		X	2	NO
Advanced Chemistry			X	X		X	2	YES
Anatomy and Physiology		X	X	X		X	2	YES

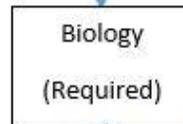
## Science Course Offerings Flow Chart - Option A

### Ninth Grade Year



### Tenth Grade Year

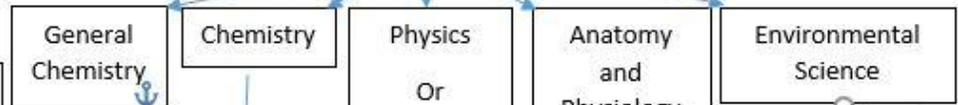
Any Eleventh Grade Science course excluding Anatomy and Physiology can be taken as a second science course during 10<sup>th</sup> grade year



### Eleventh Grade Year

A second science course may be taken provided pre-requisites are met during 10<sup>th</sup> grade year

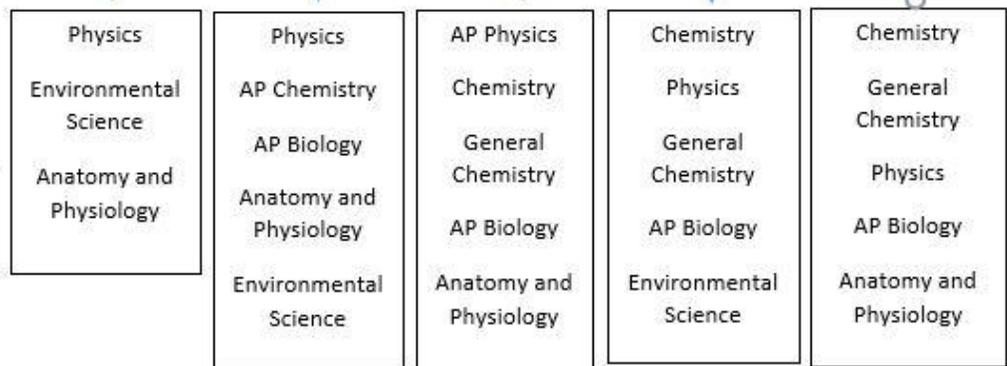
AP Physics may be taken by calculus students without a physics pre-requisite



### Twelfth Grade Year

Any course within a box that correlates to your path may be chosen

Multiple science courses may be taken provided pre-requisites are met during 10<sup>th</sup> and/or 11<sup>th</sup> grade years



## Science Course Offerings Flow Chart - Option B

(Requirements to Enter Biology as a Freshman Must be Met)

(Students Must Take One Year of Chemistry and One Year of Physics before Graduation)

**Ninth Grade Year**

**Tenth Grade Year**

Both courses may be taken at the same time

**Eleventh Grade Year**

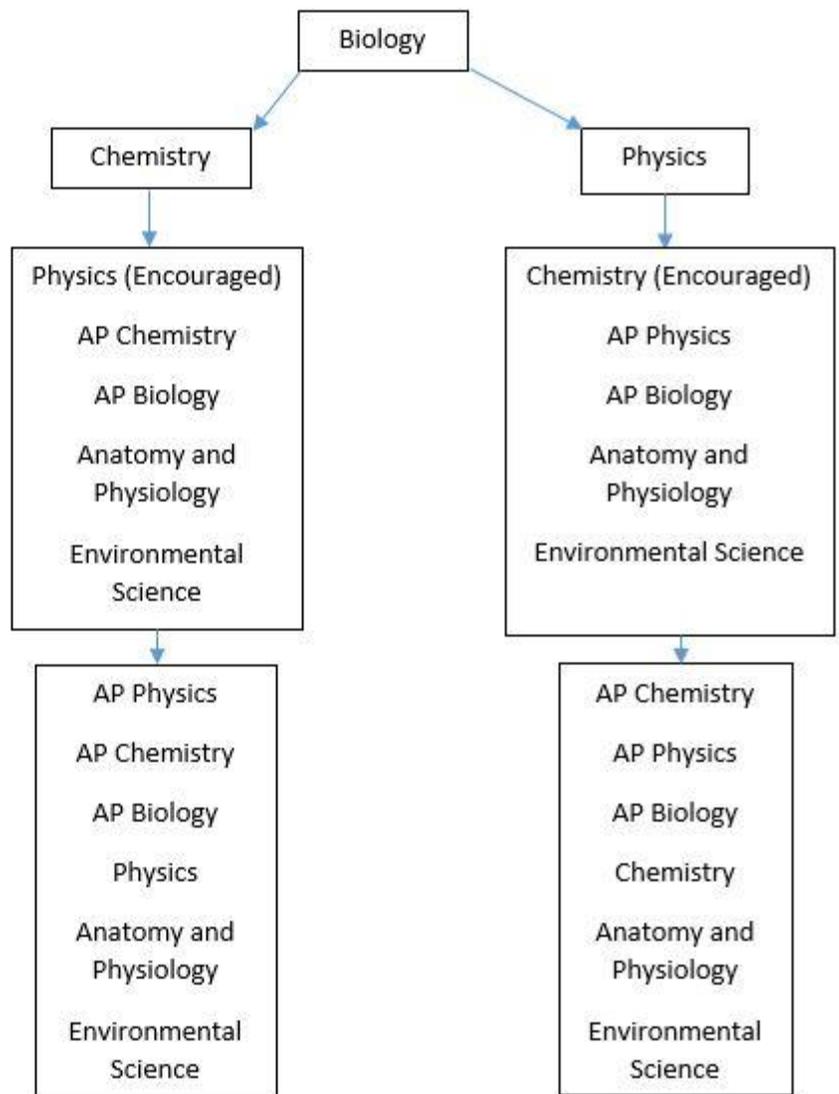
Any course within a box that correlates to your path may be chosen

A second science course may be taken provided pre-requisites are met during 10<sup>th</sup> grade year

**Twelfth Grade Year**

Any course within a box that correlates to your path may be chosen

Multiple science courses may be taken provided pre-requisites are met during 10<sup>th</sup> and/or 11<sup>th</sup> grade years



## College Bound

### Science Major

(Medical fields, Pharmacy, Engineering, etc.)

- 9<sup>th</sup> Grade (2 credits)
- Foundations of Science
  - Biology (if requirements met)

#### 10<sup>th</sup>-12<sup>th</sup> Grades

- Biology (2 credits)
- Chemistry (2 credits)
- Physics (2 credits)
- AP Biology (2 credits)
- AP Chemistry (2 credits)
- AP Physics (2 credits)
- Anatomy and Physiology

## College Bound

### Non-Science Major

(6 credits of science to graduate)

#### 9<sup>th</sup> Grade

- Foundations of Science (2 credits)

#### 10<sup>th</sup> Grade

- Biology (2 credits- strongly recommended)

#### 11<sup>th</sup> and/or 12<sup>th</sup> Grades

*(Even though only 6 credits are required, 8 total science credits are encouraged.)*

- Chemistry (2 credits)
- Physics (2 credits)

## Minimum Requirements

(6 credits of science to graduate)

#### 9<sup>th</sup> Grade

- Foundations of Science (2 credits)

#### 10<sup>th</sup> / 11<sup>th</sup> / 12<sup>th</sup> Grades

Take 2 of the courses below to obtain 4 more credits

#### 10<sup>th</sup> Grade

- Biology (2 credits strongly recommended)

#### 11<sup>th</sup> or 12<sup>th</sup> Grade

- Environmental Science (2 credits)
- General Chemistry (2 credits)

## SCIENCE

Six credits in Science are required for graduation from Mason City High School.

**182731/182732**

**FOUNDATIONS OF SCIENCE 9**

**ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE**

In Foundations of Science, students will investigate real life problems in the scientific fields of Astronomy, Geology, Chemistry, and Physics. Mathematical concepts will be taught using a science perspective that allows proper scientific measurement techniques to be demonstrated and used throughout the course. Successful completion of this course will provide students with necessary content background to be in succeeding science courses. Assessment will be based on scientific content knowledge along with demonstrations of critical thinking, writing, and process application skills.

**182521/182522**

**BIOLOGY**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE

Biology is a challenging course designed for all students. Investigations are focused toward the ecological basis of life, biodiversity, cell structure and function, genetics, variation and adaptation, and human biology. This course is open to incoming 9<sup>th</sup> graders who are looking for a strenuous course as a freshman. Preference will be given to those that are in Algebra or higher as an 8<sup>th</sup> grader because the course is designed for 10<sup>th</sup> – 12<sup>th</sup> graders and will ensure success with pre-requisites in future college bound science classes. 9<sup>th</sup> graders wanting to take this class must show proficiency on a Foundations of Science test at the end of 8<sup>th</sup> grade.

**182561/182562**

**AP BIOLOGY**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE  
PREREQUISITE: BIOLOGY (A or B grade)  
A-B GRADES IN ALL OTHER SCIENCE COURSES  
CHEMISTRY IS STRONGLY RECOMMENDED  
BEFORE TAKING AP BIO

Advanced Biology is designed to be the equivalent of a college introductory Biology course for Biology majors. It differs significantly from Biology in the textbook, the range and depth of topics, and the effort and time required by students. The goal of Advanced Biology is to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. The course focuses on understanding important relationships, processes, mechanisms, and potential extensions and applications with an understanding of specialized terminology and technical details. It is recommended that students have earned an A or B in the prerequisite courses of Biology and all other science classes. This is a very rigorous and intense course.

**182541/182542**

**ENVIRONMENTAL SCIENCE**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE  
PREREQUISITE: BIOLOGY

In environmental science students will learn to investigate the ecosystems around us. The students will specifically focus on biome variation, ecological energy, environmental pollution, population dynamics, diversity of Iowa's ecology, and field lab research techniques.

**182621/182622**

**PHYSICS**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE  
PREREQUISITE: GEOMETRY

This course is intended for college bound students with career interests in any of the sciences, mathematics, computers or engineering. Physics attempts to prepare them for the rigorous courses they will face in college. Laboratory experiments constitute a major portion of the course. Topics include force, motion, energy, heat, waves, light, and electricity.

**182641/182642**

**AP PHYSICS**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE  
PREREQUISITE: ALGEBRA 2 AND PHYSICS  
OR CALCULUS

Advanced Physics is designed for those students whose career plans will require them to study Physics in college. The topics covered are similar to the topics in Physics, but are done at a greater depth. The laboratory work and the mathematical relationships are particularly more challenging. This course prepares students to take the Advanced Placement Physics Exam B in May. It is recommended that students have earned an A or B in the prerequisite courses of Physics and Algebra II.

\* Students taking the Advanced Placement exam will have the AP designation added to their transcript if they score a 3 or better.

**182721/182722**

**CHEMISTRY**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE  
PREREQUISITE: ALGEBRA 1

The study of chemistry explores the matter that makes up our universe. Solving complex problems is a focus of both the classroom and laboratory. Units of study include; scientific measurement, the atom, the periodic table, chemical bonding, reactions, gas laws, aqueous solutions, and chemical equilibrium. This course is designed to prepare students for courses they will take in college.

**182741/ 182742**

**GENERAL CHEMISTRY**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE

This course covers fundamental principles and laws of chemistry with practical applications. Topics include classification of matter, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, and gas laws. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts. Laboratory experiments and computer-based exercises reinforce the basic principles as well as practical applications.

**182761/182762**

**AP CHEMISTRY**

ONE CREDIT PER SEMESTER  
2 CREDIT COURSE  
PREREQUISITE: CHEMISTRY

Advanced Chemistry is designed to be the equivalent of an introductory college chemistry course for science majors. Both the textbook assignments and laboratory requirements are similar to college work. Students electing to take this course should be willing to spend at least five hours weekly on out-of-class assignments. Advanced Chemistry expands on concepts begun in high school chemistry and will move at a college pace, considerably faster than that of the high school level course. The material is rigorous and students need to be committed, organized, and able to maintain the pace. It is recommended that students have earned an A or B in the prerequisite course of Chemistry.

\* Students taking the Advanced Placement exam will have the AP designation added to their transcript if they score a 3 or better.

**182851/182852**

**ANATOMY AND PHYSIOLOGY**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE  
PREREQUISITE: BIOLOGY

Anatomy and Physiology is a study of the human body emphasizing the complementary nature of structure and function, diseases, and metabolic processes. Laboratory work includes dissections. It is recommended for students pursuing professional training in nursing, medicine, pharmacy, physical therapy, sports medicine, and other health related careers, or wanting a better knowledge of one's own self. It is recommended that students have earned an A or B in the prerequisite course of Biology.

# Social Studies

## **Dominant Career Pathways related to the M.C.H.S. Curriculum:**

- (1) Family and Human Services**
- (2) Health Sciences**
- (3) Business/Information  
Management/Marketing**

# SOCIAL STUDIES

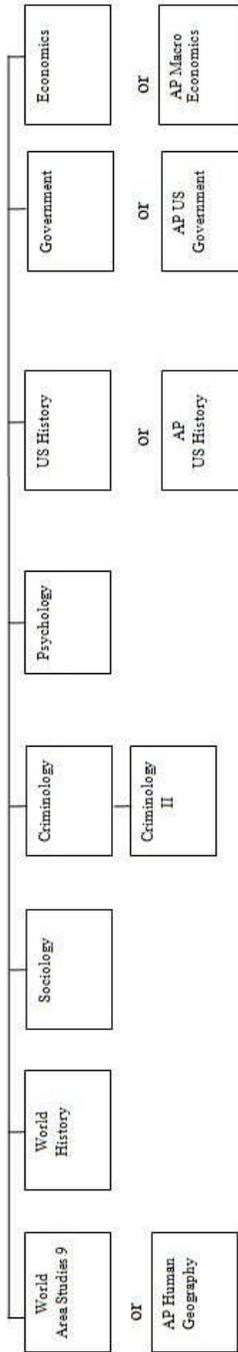
COURSE TITLE	9	10	11	12	ONE SEMESTER	TWO SEMESTER	CREDIT	PREREQUISITE REQUIRED
World Area Studies 9	X				X		1	NO
AP Human Geography	X					X	2	3.0 GPA
Psychology		X	X	X	X		1	NO
US History			X	X		X	2	NO
US History to 1877 - NIACC			X	X		X	2	NO
US History Since 1877 - NIACC			X	X		X	2	NO
World History		X	X	X	X		1	NO
Government			X	X	X		1	NO
Economics			X	X	X		1	NO
Criminology			X	X	X		1	NO
Criminology II			X	X	X		1	YES
Sociology		X	X	X	X		1	NO
AP US Government & Politics			X	X		X	2	NO
AP Macro Economics			X	X	X		1	NO

AP Courses meet requirements for graduation.

AP Human Geography will be blocked with Honors English course (teacher recommendation required)

Criminology I is a prerequisite for Criminology II

Social Studies



## SOCIAL STUDIES

Six credits in Social Studies are required for graduation. These credit requirements are: two credits in United States History, one credit in Government, and one in Economics.

**141553**                                      **WORLD AREA STUDIES 9**                                      **ONE CREDIT COURSE**

World Area Studies is a course designed to prepare freshmen for later Social Studies courses. Students are given the opportunity to explore 10 essential skills which include: critical thinking, bias, perspective, cause and effect, reading informational texts, citing and analyzing political cartoons, graphs, and timelines. Students will explore these skills while learning about regions of the world, world cultures, and current events.

**142053**                                      **AP HUMAN GEOGRAPHY**                                      **TWO CREDIT COURSE**  
**PREREQUISITE - 3.0 GPA**

The purpose of the AP course in Human Geography is to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They also learn about the methods and tools geographers use in their science and practice

Any AP (Advanced Placement) class requires hard work, intellectual curiosity, and a commitment to personal growth. Most of the work is completed outside of class, with class time dedicated to deeper understanding and analysis of the material assigned for homework, not explanation of homework. AP Human Geography is a college level class. Any AP student who takes and passes the AP Exam can potentially earn college credit.

**141613**                                      **PSYCHOLOGY**                                      **ONE CREDIT COURSE**

Psychology is an analysis and scientific study of human behavior and mental processes. The course is offered on a one semester basis for one full credit and is open to sophomores, juniors and seniors. Psychology is highly recommended for both college bound and non-college bound students with major area concentrations on behavioral theories. Other areas of study include abnormal psych, the brain, consciousness, the nervous system, perception, memory, cognition, motivation, intelligence and altered states of consciousness. Understanding the "self and others" are primary goals and emphases. Self-development, self-concept, and self-analysis are also included as a primary concentration of the course.

**141741/141742**                                      **U. S. HISTORY**                                      **ONE CREDIT PER SEMESTER**  
**(REQUIRED)**                                      **TWO CREDIT COURSE**

U.S. History is a review of our nation's development from the Civil War to the present, emphasizing the role of the past in reflecting and illuminating our own times. Major political, economic, and social themes are outlined, in addition to a survey of the foreign affairs of our nation. A wide variety of activities are incorporated into this two-semester course.

**812684**                                      **HIS-151 U.S. HISTORY to 1877**                                      **1 CREDIT PER SEMESTER**  
**NIACC**                                      **2 CREDIT COURSE**

A Survey course covering the social, political, and economic history of American civilization from the Age of Discovery through Reconstruction. Students will earn dual credit at the high school and college level. The material covered in this course is at the college level. The students will be required to read four books and other supportive material. This is a NIACC course taught at Mason City High School by a certified high school instructor. Student must understand that this is a college level course.

**812683**

**HIS-152 U.S. HISTORY Since 1877  
NIACC**

**1 CREDIT PER SEMESTER  
2 CREDIT COURSE**

A Survey course covering the social, political, and economic history of the United States since 1877. Students will earn dual credit at the high school and college level. The material covered in this course is at the college level. The students will be required to read four books and other supportive material.

This is a NIACC course taught at Mason City High School by a certified high school instructor. Student must understand that this is a college level course.

**142043**

**WORLD HISTORY-Middle Ages**

**ONE CREDIT COURSE.**

World History Middle Ages is a course that will focus on the development of Western Civilization focusing on the impact of alternative cultures we know as "barbarians". We will study these alternative civilizations with emphasis on what made them unique, powerful, and influential in World History. The units studied will be Fall of the Roman Empire, Islamic Expansion, The Vikings, Life in the Middle Ages, and The Crusades.

**141973**

**GOVERNMENT (REQUIRED)**

**ONE CREDIT COURSE**

This course is required for graduation (or AP US Government). It is designed to acquaint high school students with the fundamentals of American Government with an emphasis on federal procedures. The class also is designed to encourage the students to be informed and participate in governmental local, state, and federal affairs. Class preference will be given to juniors and seniors. Sophomores will be required to have an A or B in previous social studies classes.

**141974**

**AP UNITED STATES GOVERNMENT AND POLITICS**

**TWO CREDIT COURSE**

The Advanced Placement course in United States Government and Politics is designed to give students a critical perspective on politics and government. This course involves both the study of general concepts used to interpret United States politics and an examination of the various institutions, groups, beliefs, and ideas that make up American politics. The course is taught with college-level texts. Preparation for the A.P. test will be an integral part of the course. This course fulfills graduation requirements for graduation.

Any AP (Advanced Placement) class requires hard work, intellectual curiosity, and a commitment to personal growth. Most of the work is completed outside of class, with class time dedicated to deeper understanding and analysis of the material assigned for homework, not explanation of homework.

**141993**

**ECONOMICS (REQUIRED)**

**ONE CREDIT COURSE**

This course is required for graduation (or AP Economics). If you want to learn more about life choices, this is the course for you! Economics addresses the production, distribution, and consumption of goods and services and study of choices that are made regarding resources. Class preference will be given to juniors and seniors.

After taking this class, you should be able to understand:

1. The function of common financial instruments – loans, interest rates, stocks, insurance, credit cards and tax forms.
2. The role of scarcity and economic trade-offs and how economic conditions impact people's lives.
3. The functions of economic institutions – banks, labor unions, corporations, etc
4. How governments influence economic behavior
5. Different types of economies throughout the world in relation to one another.
6. Factors that create interdependence among countries throughout the world.
7. How advancing technology affects the global economy.

**141964**

**AP MACROECONOMICS**

**ONE CREDIT COURSE**

This course fulfills the graduation requirements. An AP course in Macroeconomics is designed to give the student a thorough understanding of the principles of economics that apply to an economic system as a whole. Such a course

places particular emphasis on the study of national income and price determination, and also develops familiarity with economic performance measures, economic growth, and international economics.

Any AP (Advanced Placement) class requires hard work, intellectual curiosity, and a commitment to personal growth. Most of the work is completed outside of class, with class time dedicated to deeper understanding and analysis of the material assigned for homework, not explanation of homework.

**141653**

**CRIMINOLOGY**

ONE CREDIT PER SEMESTER  
ONE CREDIT COURSE

Criminology is a one-semester course based on the study of criminal behavior and society's response to it, including the analysis of policies and systems designed to control criminality. Over the course of the semester, we will examine the science of law making, law breaking, and law enforcing. Students will review theories and data predicting where, when, by whom and against whom crimes happen. Students will also examine real-life cases and apply the basic themes and concepts in their analyses of those cases. Due to the graphic nature of the content studied, this course is only opened to juniors and seniors.

**CRIMINOLOGY II (Criminology is a prerequisite to this class)**

ONE CREDIT PER SEMESTER  
ONE CREDIT COURSE

This is a class exclusively designed for self-starting, self-motivated students who find an interest and a need beyond the basic Criminology class. Students will select two specific areas in this field of interest to them and proceed under the direction of an MCHS teacher and a mentor. Mentors will consist of professionals from a variety of disciplines within the field of Criminology/Investigations. Students will be required to meet once a week with their assigned MCHS Instructor and whenever arranged with their mentor. The instruction will take place through observation, research and one on one discussion with a teacher or mentor. Grades will be determined by the submission of a midterm, a final paper, and an assessment based on discussion submitted by the mentor/ teacher.

**141633**

**SOCIOLOGY**

ONE CREDIT COURSE

Sociology is an elective course that studies human society and social behavior. Positive human relationships are an essential part of a civilized society and how we interact with each other is important so that we can find answers to questions and solve problems in our world. "Sociology teaches us to look at life in a scientific, systematic way." This course deals with the social atmosphere that helps to make us who we are and how we behave. Sociology will cover topics such as culture, violence, deviance, social control, socialization and personality, group behavior, social class, and social institutions. **The key component of this course is to study ourselves and the society that influences our behavior.**

# Special Ed

## Special Ed

**502517**                      **ENGLISH SKILLS 9-12**                      ONE CREDIT PER SEMESTER

English Skills is a one credit per semester class where the goal is to improve reading comprehension and writing skills. This class is structured to work on comprehension with both literacy and informational text and to improve vocabulary. This class also has a strong focus on conventions, content, organization, and sentence fluency, so students can improve their written language skills.

**501643/501644**                      **MATH LAB**                      ONE CREDIT PER SEMESTER

Math lab is a one credit per semester class where the goal is to improve and decrease deficiencies in mathematical skills. The class will determine areas of difficulties and provide skill based instruction to remediate skill deficiencies.

**509993/509994**                      **SKILL DEVELOPMENT**                      ONE CREDIT PER SEMESTER

Skill development is a one credit per semester class where the goal is to work on IEP behavior goals as well as organizational, social and study skills for students based on the IEP.

## Special Ed 9th

**501514/501515**                      **WORLD STUDIES 9**                      ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE

World Studies is a two semester, two credit 9th grade social studies course offered in a smaller class setting for students who need accommodations and modifications to the curriculum. World Studies is a course designed to prepare freshmen for later Social Studies courses. Students are given the opportunity to explore 10 essential skills which include: critical thinking, bias, perspective, cause and effect, reading informational texts, citing and analyzing political cartoons, graphs, and timelines. Students will explore these skills while learning about regions of the world and specific historical events.

**501706/501707**                      **INTRODUCTION TO ALGEBRA STUDIES**                      ONE CREDIT PER SEMESTER  
TWO SEMESTER COURSE

Students will study topics from the first half of Algebra 1: statistics and data analysis, variable expressions, functions and relations, solving variable equations, graphing techniques. This is the first course of a two year study of Algebra 1 and is considered a small group direct instruction course as the general curriculum will be modified. Placement in this course is the result of an IEP team decision.

**501004/501005**                      **ENGLISH 9 STUDIES**                      ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE

English 9 Studies is a two semester, two-credit course required of all freshman students. Continuing the development of their communication skills and their understanding and appreciation of literature students will engage in a variety of learning activities that adhere to the four district standards of reading, writing, speaking and vocabulary development. The curriculum of the course will require students to build solid communication skills through critical thinking, problem solving, cooperative learning, a six-trait reading model, and a six trait writing model. This course is available by teacher approval only.

**501443**                      **ECONOMIC STUDIES**                      ONE CREDIT COURSE

This course is required for graduation (or AP Economics). If you want to learn more about money, this is the course for you! Economics addresses the production, distribution, and consumption of goods and services and study of choices that are made regarding resources.

After taking this class, you should be able to understand:

1. The function of common financial instruments – loans, interest rates, stocks, insurance, credit cards and tax forms.
2. The role of scarcity and economic trade-offs and how economic conditions impact people's lives.
3. The functions of economic institutions – banks, labor unions, corporations, etc
4. How governments influence economic behavior
5. Different types of economies throughout the world in relation to one another.
6. Factors that create interdependence among countries throughout the world.

How advancing technology affects the global economy.

**501844/501845**

**SCIENCE 9 STUDIES**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE

In Science 9 Studies is a two credit, two semester course where students investigate the scientific fields of Astronomy, Geology, Physics and Chemistry. Successful completion of this course will provide students with necessary content background to be in succeeding science courses. Assessment is based on scientific content knowledge, critical thinking, and applications skills. This course is available by teacher approval only.

## Special Ed 10th

**501724/501725**

**ALGEBRA 1 STUDIES**

ONE CREDIT PER SEMESTER  
TWO SEMESTER COURSE

This course will study statistics and data analysis, variable expressions, functions and relationships, solving variable equations, graphing techniques, solving systems of equations and inequalities, applications of lines and distance formulas, polynomial operations, and quadratic functions and equations. This is the second course of a two year study of Algebra 1 and is considered a small group direct instruction course as the general curriculum will be modified. Placement in this course is the result of an IEP team decision.

**501821/501822**

**BIOLOGY STUDIES**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE

Biology Studies is a 2 credit, 2 semester course which focuses on the understanding of relationships, processes, and applications of Biology concepts to daily life, rather than direct memorization of Biology content. In this class, students investigate cells, genetics, evolution, adaptation, ecology, homeostasis and body systems, and how all of these apply to daily life. This course is available by teacher approval only. Science 9 Studies prerequisite.

**501011/501012**

**ENGLISH 10 STUDIES**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE

English 10 Studies is a two-semester class required of all sophomore students. The course content is focused on providing the language arts skills necessary in order to be successful in the world, both academic and otherwise. No matter who you are, what skills you have now, or what your plans are, this course will provide you the opportunity to increase your effectiveness and potential. Students read a variety of genres, respond to those genres through activities and writing assignments, and write their own autobiography in English 10 Studies. This class is open only to students with teacher approval.

**507021/507022**

**INTRO TO THE WORLD OF WORK**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE

This one credit course is offered to students in order to identify and create a career plan. Students will develop skills in seeking and keeping a career in the world of work that matches their strengths and interests. This course is available to students with teacher approval only and recommend for sophomores.

## Special Ed 11th/12th

**501023/501024**

**ENGLISH 11 STUDIES**

ONE CREDIT PER SEMESTER  
TWO SEMESTER COURSE

This two semester course is intended to provide reading and writing experiences and instruction to engage all learners. It is also an intention of this course to allow students to think critically about and become engaged with a variety of texts while developing life-long literacy skills. The reading selections are by American authors; students are required to read novels, short stories, and dramas. The writing of this course requires students to write using several modes, including reflective writing, essay writing, research and argumentation. The emphasis will be placed on American literary tradition from the Colonial period to the postmodern authors. This course is teacher approval only.

**501734/501735**

**INFORMAL GEOMETRY STUDIES**

ONE CREDIT PER SEMESTER  
TWO SEMESTER COURSE  
PREREQUISITE: ALGEBRA 1,  
ALGEBRA 1 STUDIES, OR  
INTRO TO ALGEBRA

This course uses an intuitive approach to studying geometry. There is not an emphasis on formal logic and proof in this course. Topics studied are: deductive and inductive reasoning, transformations, distance, and angle measurement, angle relationships, polygons, parallel and perpendicular relationships, similarity, congruence, circles area, surface area, volume, polyhedrons, coordinate geometry, and simple trigonometry. This course considered a small group direct instruction course as the general curriculum will be modified. Placement in this course is the result of an IEP team decision.

**501744/501745**

**PRACTICAL MATH STUDIES**

ONE CREDIT PER SEMESTER  
TWO SEMESTER COURSE

This course is for Junior and/or Seniors who need a third or fourth year of math. The class will focus on living, learning, and working math skills needed for everyday life. This course considered a small group direct instruction course. Placement in this course is the result of an IEP team decision.

**501746**

**PRACTICAL MATH STUDIES 2**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE

This course is for students needing a fourth year of math. The class will focus on Algebra and Geometry skills and college math readiness. Placement in this course is the result of an I.E.P. team decision.

**162091/162092**

**INTRO TO ALGEBRA STUDIES**

ONE CREDIT PER SEMESTER  
TWO SEMESTER COURSE  
PREREQUISITE: PRE ALGEBRA OR FOUNDATIONS  
OF MATH

Students will study topics from the first half of Algebra 1: statistics and data analysis, variable expressions, functions and relations, solving variable equations, graphing techniques. The pace of this course is slow, allowing for a lot of practice and application problems. This is the first course of a two year study of Algebra 1. Placement in this course is the result of an I.E.P. team decision.

**501871/501872**

**ENVIRONMENTAL SCIENCE  
STUDIES**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE

Environmental Science is a two semester, 2 credit junior level course that investigates real life issues in the areas of ecology, populations, water, air, and land usage; mineral and energy resources. Personal and social implications of science are explored. Students build scientific processing skills through critical thinking, problem solving, and data

analysis. Units include how ecosystems work, biomes, biodiversity, climate change, food and land usage, nonrenewable and renewable resources, and environmental and human health. This course is available by teacher approval only.

**501484/501485**

**US HISTORY STUDIES  
(REQUIRED)**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE  
PREREQUISITE: FOUNDATIONS OF  
SOCIAL STUDIES OR WORLD STUDIES

US History is a review of our nation's development from the Civil War to present, emphasizing the role of the past in reflecting and illuminating our own times. Major political, economic and social themes are outlined in addition to a survey of the foreign affairs of our nation. A wide variety of activities are incorporated in this two-semester course. This course is available by teacher approval only.

**501034/501035**

**ENGLISH 12 STUDIES**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE

This two semester course is designed to provide structured experiences in reading, writing, and speaking skills. Students will improve critical thinking skills in order to develop competence for post-secondary educational experiences and career opportunities. The literature covered in this course will include contemporary novels, and, short stories. Writing experiences will include a research paper and journaling. Multiple presentations will be given in this course. This course is available by teacher approval only.

**501455**

**GOVERNMENT STUDIES  
(REQUIRED)**

ONE CREDIT PER SEMESTER  
ONE CREDIT COURSE

Government is a one-semester one-credit class required of all seniors for graduation from Mason City High School. The primary focus of the course is to acquaint students with the fundamentals of American government at the local, state, and federal levels. This class is open only to students with teacher approval.

**501444**

**ECONOMIC STUDIES**

ONE CREDIT PER SEMESTER  
ONE CREDIT COURSE

This course is required for graduation (or AP Economics). If you want to learn more about money, this is the course for you! Economics addresses the production, distribution, and consumption of goods and services and study of choices that are made regarding resources.

After taking this class, you should be able to understand:

1. The function of common financial instruments – loans, interest rates, stocks, insurance, credit cards and tax forms.
2. The role of scarcity and economic trade-offs and how economic conditions impact people's lives.
3. The functions of economic institutions – banks, labor unions, corporations, etc
4. How governments influence economic behavior
5. Different types of economies throughout the world in relation to one another.
6. Factors that create interdependence among countries throughout the world.

How advancing technology affects the global economy.

This is a one-semester course where the emphasis is on the "personal" aspects of economics. The units covered are: insurance, investments, housing, credit, and taxation.

**507031**

**WORK EXPERIENCE I**

ONE CREDIT PER SEMESTER  
JUNIOR STATUS

This two-credit course features "hands-on" job training in a community based job site; students are placed at a worksite where they observe and work with a worksite resource person. Work experience helps a student build sound work habits and attitudes and realistic expectations by participating in actual work experience through different job placements.



**502607/502608**

**APPLIED SCIENCE SKILLS**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE

This self-contained classroom science curriculum focuses on the study of a healthy lifestyle and nutrition. Environmental issues, such as: ecology, air, water and land use are explored. The earth and the solar system, space, weather and our changing earth are investigated. Biology studies include: classifying animals and plants, human growth and development, genetics and health.

**501467/501468**

**APPLIED SOCIAL STUDIES**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE

This self-contained classroom's social studies curriculum focuses on: our nation's history from the beginning to the present day. This overview will focus on the laws and other important aspects of our country's history. These aspects will include knowledge of our government, important historical documents, and federal, state, and local governments.

**502601**

**Essential Elements Literacy**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE

This self-contained classroom's English curriculum focuses on reading and writing skills at the foundational level using the Essential Elements of the Iowa Core Curriculum in Literacy. This class works on standards, benchmarks, and learning targets as outlined in the Dynamic Learning Maps for students who are assessed using the Iowa Alternate Assessment. Students will learn functional reading skills and strategies, emergent and basic writing skills, and communication skills.

**502601**

**Essential Elements Math**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE

This self-contained classroom's math curriculum focuses on foundations of math using the Essential Elements of the Iowa Core Curriculum in Mathematics. The class works on standards, benchmarks, and learning targets as outlined in the Dynamic Learning Maps for students who are assessed using the Iowa Alternate Assessment. Students will learn functional math skills, including basic money identification, basic market math and counting money, telling time, and basic measurement skills for independent living.

**501872**

**Essential Elements Science**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE

This self-contained classroom's science curriculum focuses on the basic concepts and processes of science using the Essential Elements of the Iowa Core Curriculum in Science. The class works on standards, benchmarks, and learning targets as outlined in the Dynamic Learning Maps for students who are assessed using the Iowa Alternate Assessment. Students will learn basic concepts of the human body, animal and plant life, earth science, astronomy, and physics and motion.

**502602**

**Essential Elements Social Studies**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE

This self-contained classroom's social studies curriculum focuses on the basic concepts of government, geography, and history, using the Iowa Core Curriculum in Social Studies as a reference. The class learns about local government, community living skills, and the basic history of our town and state.

**501468**

**21<sup>st</sup> Century Skills**

ONE CREDIT PER SEMESTER  
TWO CREDIT COURSE

This self-contained classroom elective course focuses on the four areas of financial literacy, civic literacy, employability, and leisure/recreation skills. Students will learn basic independent living skills, money management, basic cooking skills, basic vocational skills, and how to participate in local or community recreation activities.