WELCOME TO MUSCATINE HIGH SCHOOL

Muscatine High School provides a comprehensive curriculum with many special programming features to complement students’ instructional programs. This Curriculum Guide contains Graduation Requirements, Course Descriptions, and Recommended Programs of Study.

When selecting courses, please consider the following:
- Graduation Requirements
- Student’s Abilities
- Student’s Post-High School Plans
- Time availability: class load + activity schedule

We are proud to offer a quality educational program for all students at Muscatine High School. Please take time to consult this Curriculum Guide and contact the teaching, counseling and administrative staff for additional information.

Administrators and Counseling Staff

Dr. Jared Smith Principal
Chris Nienhaus Assistant Principal
Mark Groteluschen Assistant Principal
Ryan Castle Assistant Principal
Mike Morgan Athletic/Activities Director
Scott Mauck Counselor for the Class of 2022
Jacob Mueller Counselor for the Class of 2021
Karey Hawkins Counselor for the Class of 2020
Brandon Welsch Counselor for the Class of 2019
Ellie Thomas Counselor for the MHS Academy
Maggie Milani Counselor for College & Career
Kris Meeker Guidance Clerk
Lori Hubbard Guidance Clerk

Affirmative Action Policy

It is the policy of the Muscatine Community School District not to discriminate on the basis of race, creed, color, gender, marital status, sexual orientation, national origin, religion, age, veteran status or disability in its education programs, activities or employment practices. If you believe you have been discriminated against or treated unjustly, please contact one of the following:

Equity Director
2900 Mulberry Avenue, 263-7223

Civil Rights Compliance Officer
2705 Cedar Street, 263-6141

Affirmative Action Coordinator
2900 Mulberry Avenue, 263-7223

Special Education and 504 Coordinator
2900 Mulberry Avenue, 263-7223
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Dear Students and Parents,

Muscatine High School is a wonderful place to be a student where your academic course work prepares you to reach your future goals. Registering for next year’s courses is a part of that experience.

The 2018-19 edition of the Muscatine Curriculum book is an important resource for students and parents, which we hope, will assist you in making good course choices.

As you page through the Curriculum Guide, you will find that the book is divided into two distinct sections. The first contains general information about such topics as graduation requirements, dropping and adding courses, schedule changes, and college admission requirements. The second section provides descriptions of all course options available to students, worksheets for course selection, the four-year plan.

We suggest that you view the registration process in the broad scope of a four-year plan as you reflect on your personal strengths, interests and future plans. Parents, teachers, and your counselor will guide you through this process. We encourage you to make careful consideration of the opportunities available to your so that you are able to make the best use of the academic opportunities available to you.

You should use this Curriculum Guide to prepare for your course request appointment with your Guidance Counselor. These will be scheduled in February. As you prepare, carefully review the general information section, analyze the course descriptions and “pencil in” your choices on the worksheets at the back of handbook.

It is important to know that the courses you select during this process are intended to be your final selection for the 2018-19 school year. We develop our master schedule of classes and we hire and re-employ teachers based on the enrollment decisions you make. As high school students, you should make careful decisions and then follow through with them. Hopefully you will find our registration process one that works well for you. If you have questions or suggestions, please see your counselor.

Sincerely,

Jared Smith
Principal
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Phone #</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Jared Smith</td>
<td>Principal</td>
<td>563-263-6141 x1101</td>
<td><a href="mailto:jared.smith@mcsdonline.org">jared.smith@mcsdonline.org</a></td>
</tr>
<tr>
<td>Mr. Chris Nienhaus</td>
<td>Assistant Principal</td>
<td>563-263-6141 x1131</td>
<td><a href="mailto:chris.nienhaus@mcsdonline.org">chris.nienhaus@mcsdonline.org</a></td>
</tr>
<tr>
<td>Mr. Ryan Castle</td>
<td>Assistant Principal</td>
<td>563-263-6141 x1103</td>
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<tr>
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<td>563-263-6141 x1102</td>
<td><a href="mailto:mark.groteluschen@mcsdonline.org">mark.groteluschen@mcsdonline.org</a></td>
</tr>
<tr>
<td>Mr. Mike Morgan</td>
<td>Director of Athletic &amp; Activities</td>
<td>563-263-6141 x1104</td>
<td><a href="mailto:mike.morgan@mcsdonline.org">mike.morgan@mcsdonline.org</a></td>
</tr>
<tr>
<td>Mrs. Karey Hawkins</td>
<td>School Counseling Department Chair</td>
<td>563-263-6141x1123</td>
<td><a href="mailto:karey.hawkins@mcsdonline.org">karey.hawkins@mcsdonline.org</a></td>
</tr>
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<table>
<thead>
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<th>Name</th>
<th>Department</th>
<th>Phone #</th>
<th>Email</th>
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<tbody>
<tr>
<td>Mr. Dave Tometich</td>
<td>Agricultural Science</td>
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<tr>
<td>Mrs. Vicki Tometich</td>
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<td><a href="mailto:vicki.tometich@mcsdonline.org">vicki.tometich@mcsdonline.org</a></td>
</tr>
<tr>
<td>Mr. Jeff Heid</td>
<td>Fine Arts</td>
<td>563-263-6141 x1150</td>
<td><a href="mailto:jeff.heid@mcsdonline.org">jeff.heid@mcsdonline.org</a></td>
</tr>
<tr>
<td>Mr. Ryan Kitzmann</td>
<td>Industrial Tech</td>
<td>563-263-6141 x1366</td>
<td><a href="mailto:ryan.kitzmann@mcsdonline.org">ryan.kitzmann@mcsdonline.org</a></td>
</tr>
<tr>
<td>Mr. Randy Guerra</td>
<td>Language Arts</td>
<td>563-263-6141 x1371</td>
<td><a href="mailto:randy.guerra@mcsdonline.org">randy.guerra@mcsdonline.org</a></td>
</tr>
<tr>
<td>Mrs. Jen Keltner</td>
<td>Librarian</td>
<td>563-263-6141 x1181</td>
<td><a href="mailto:jen.keltner@mcsdonline.org">jen.keltner@mcsdonline.org</a></td>
</tr>
<tr>
<td>Mrs. Betsy Hirschfeld</td>
<td>Math</td>
<td>563-263-6141 x1301</td>
<td><a href="mailto:gabe.mcdonald@mcsdonline.org">gabe.mcdonald@mcsdonline.org</a></td>
</tr>
<tr>
<td>Mrs. Ann Edkin</td>
<td>PE</td>
<td>563-263-6141 x1230</td>
<td><a href="mailto:ann.edkin@mcsdonline.org">ann.edkin@mcsdonline.org</a></td>
</tr>
<tr>
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<td><a href="mailto:allison.coffman@mcsdonline.org">allison.coffman@mcsdonline.org</a></td>
</tr>
<tr>
<td>Ms. Rachel Hansen</td>
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<td>563-263-6141 x1382</td>
<td><a href="mailto:rachel.hansen@mcsdonline.org">rachel.hansen@mcsdonline.org</a></td>
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<tr>
<td>Mr. Bob Long</td>
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<td>563-263-6141 x1442</td>
<td><a href="mailto:bob.long@mcsdonline.org">bob.long@mcsdonline.org</a></td>
</tr>
<tr>
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<td><a href="mailto:milaena.reade@mcsdonline.org">milaena.reade@mcsdonline.org</a></td>
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</tbody>
</table>

**General Information**

**Advanced Placement Program**

The Advanced Placement (AP) Program provides students with the opportunity to pursue college-level studies while still in high school and to receive advanced placement and/or credit when entering college. Qualified, academically oriented student in the 9th, 10th, 11th, and 12th grades are eligible to participate in the Advanced Placement Program at Muscatine High School.

The Advanced Placement Program at Muscatine High School consists of the following courses:

<table>
<thead>
<tr>
<th>AP Art Studio</th>
<th>AP Calculus AB</th>
<th>AP Physics 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>AP Language &amp; Comp.</td>
<td>AP Statistics</td>
<td>AP Physics 2</td>
</tr>
<tr>
<td>AP Lit. &amp; Composition</td>
<td>AP Music Theory</td>
<td>AP World History</td>
</tr>
<tr>
<td>AP Psychology</td>
<td>AP Biology</td>
<td>AP Microeconomics</td>
</tr>
<tr>
<td>AP U.S. Gov’t &amp; Politics</td>
<td>AP Chemistry</td>
<td>AP Macroeconomics</td>
</tr>
<tr>
<td>AP U.S. History</td>
<td>AP Environmental Sciences</td>
<td>AP Human Geography</td>
</tr>
<tr>
<td>AP Seminar</td>
<td>AP Computer Science Principles</td>
<td>AP Research</td>
</tr>
</tbody>
</table>
Departments
Seven departments offer Advanced Placement courses: Art, Business, English, Mathematics, Music, Sciences, and Social Studies. These courses adhere to College Board approved course descriptions and serve as the primary vehicle to prepare students for the voluntary AP examinations in May. In addition to preparing students for the AP exams, AP courses allow students to experience the pace and intensity of college-level courses while still in high school. Some AP courses may explore opportunities for students to work in teams on interdisciplinary themes or projects. Such activities would be designed to provide students the opportunity to solve real-world problems across AP subject areas. The AP courses are challenging and stimulating, require more work and more time than other high school courses.

Examinations
The Advanced Placement examinations are administered each year during the first and second weeks of May and can be described as "tough, but fair." Usually three hours in length, each exam consists of a multiple-choice section and free response section that requires essay writing or problem solving. Every examination receives an overall grade from a team of carefully selected college professors and high school AP teachers on a five-point scale: 5 (extremely well qualified), 4 (well-qualified), 3 (qualified), 2 (possibly qualified), and 1 (no recommendation). An AP grade report is sent in July to each student, the high school, and if the student requested, to the college. All enrolled AP students are expected to take their AP course examinations. Examinations will be funded by Muscatine High School.

Credit
Although each college determines what AP examination grades it will accept for credit and or advanced placement, the great majority of colleges accept grades of 3 or better and award the student with credit in the subject matter tested. In some cases, no credit is given, but the student may begin the program of study at an advanced level. Students wanting to know what AP grades are considered acceptable by the colleges in which they are interested should write the Director of Admissions at the college or consult with the Director of School Counseling at Muscatine High School.
Senior Year Plus

The 2008 legislative session enacted House File 2679 that included changes that consolidate and standardize existing programs that have the potential to provide college credit coursework to high school students. The programs include:

- Advanced Placement (AP) courses
- Post Secondary Enrollment Options program (PSEO)
- Concurrent Enrollment
- Career Academy courses

A significant change is the establishment of student eligibility criteria to enroll in one of the above four options. This is a district decision, but the Department of Education (DE) strongly recommends that the Iowa Assessment proficiency cut score in reading, math, and science be used as the primary criteria with alternative equivalent criteria also be established for students who may not test well. The DE refers to this change as Senior Year Plus.

Advanced Placement (AP) Courses

Advanced Placement (AP) courses are college-level courses offered to outstanding students during all four years of high school. For more information on curriculum of each course, visit www.collegeboard.com. MHS AP courses include:

**English/Language Arts:**
- AP English Language and Composition
- AP English Literature and Composition

**Social Studies:**
- AP Human Geography
- AP World History
- AP Psychology
- AP United States History
- AP Government

**Science:**
- AP Biology
- AP Chemistry
- AP Physics 1
- AP Physics 2
- AP Environmental Science

**Math:**
- AP Statistics
- AP Calculus AB

**Business:**
- AP Macro Economics
- AP Micro Economics

**Fine Arts:**
- AP Studio Art
- AP Music Theory

**Electives:**
- AP Computer Science Principles
- AP Seminar
- AP Research
Post-Secondary Enrollment Options (PSEO)
Junior and senior students who wish to pursue more rigorous academic options while still attending MHS may enroll in college classes. Students must have all PSEO enrollment and approvals completed before enrolling in PSEO classes. **The student and family will be responsible for transportation and will assume the cost of tuition, books, and fees if the student drops or fails the class.** Also, grades from PSEO courses will appear on the MHS transcript and will affect athletic eligibility. Not all college classes qualify under PSEO. Please see your counselor for information. Forms are available in the MHS Student Services office. Courses taken through Muscatine Community College require a college admission application ([https://www.eicc.edu/apply](https://www.eicc.edu/apply)) and proficient assessment scores.

Concurrent Enrollment Program* *(Taught at MHS)*
(Contractual Agreement with MCC; students are enrolled in an MCC course that is taught at MHS) *Subject to change*

<table>
<thead>
<tr>
<th>Industrial and Engineering Technology</th>
<th>Art and Business</th>
<th>Agriculture</th>
<th>Science and Engineering (PLTW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Cad I</td>
<td>Digital Art I</td>
<td>Adv. Animal Science</td>
<td>Introduction to Engineering Design</td>
</tr>
<tr>
<td>CIM</td>
<td>Digital Art II</td>
<td>Agriculture II</td>
<td>Principles of Engineering</td>
</tr>
<tr>
<td>Manufacturing I</td>
<td>Computer Applications II</td>
<td>Animal Nutrition &amp; Management</td>
<td>Civil Engineering and Architecture</td>
</tr>
<tr>
<td>Manufacturing II</td>
<td>Film as Literature</td>
<td>Forestry and Wildlife Management</td>
<td>Environmental Sustainability</td>
</tr>
<tr>
<td>Advanced Welding Technology</td>
<td>Horticulture I</td>
<td>Engineering Design and Development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Horticulture II</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equipment Repair &amp; Maintenance</td>
<td></td>
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</tbody>
</table>
Career Academies

A limited number of seniors may be able to participate in a MCC Career Academy within their interest area. Career Academies are designed to begin a program in a selected career track. Classes are taken part time throughout part of the school day of a student’s senior year and classes count as both MCC credit and a Muscatine High School elective credit. The Career Academies that are currently offered and a brief description is below.

Welding:
The Welding Career Academy at Muscatine Community College provides students the opportunity to earn a college Certificate in Basic Welding. This certificate ladders into a welding diploma or AAS degree programs in a range of industrial welding techniques: Flux Core, Gas Metal, Oxy-Acetylene, and Shielded Metal Arc. Students will also earn a OHSA General Industry 10-hour credential during the Academy. The welding lab is equipped to provide each student with hands-on learning opportunities, with instructors present and available for guidance. Students will investigate employment opportunities in the welding field by visiting area business and industry. Courses are held on the Muscatine College Campus from 12:50-2:50 p.m. daily.

Culinary:
The Culinary Career Academy at Muscatine Community College provides students the opportunity to earn a college Certificate in Culinary Arts. This certificate ladders into a Culinary Arts diploma or AAS degree programs. Students who pass the ServSafe Food Protection Manager Certification exam also earn a Serve Safe Certificate. Students will also acquire foundational skills in food service sanitation and safety, basic skills of grilling, frying, broiling, sautéing, vegetable cookery, recipe conversion, recipe costing, creating soups and stocks, basics theory and preparation of baked items such as yeast bread, cookies, creams, puddings, pie crusts, filling and quick breads. Students will also be required to complete a practicum that provides the students with on-the-job training. Courses are held at the Merrell Hotel from 12:50-2:50 p.m. daily.

Advanced Manufacturing:
The Advanced Manufacturing Career Academy at Muscatine Community College provides students the opportunity to earn a college Certificate in Basic Electricity. This certificate ladders into an Engineering Technology diploma or AAS degree. The Advanced Manufacturing Career Academy trains students to be specialists in the practical application and implementation of existing technology within the manufacturing field. The year. Students will also earn a OHSA General Industry 10-hour credential during the Academy. Students will also acquire foundational skills in of DC and AC circuit components analysis and their applications, basic circuit elements, common circuit configurations and analysis techniques, methods used in presenting and interpreting a variety of industrial drawings and prints, math operations, English and metric measurement, calculator functions, geometry, algebraic fractions, and functions and graphs. Students will investigate employment opportunities in the manufacturing field by visiting area business and industry. Courses are held on the Muscatine College Campus from 12:50-2:50 p.m. daily.

Agriculture:
The Agriculture Career Academy at Muscatine Community College provides students the opportunity to complete the first semester of college AAS degree in Farm or Agribusiness Management. This Academy prepares students for employment in the Agriculture field by providing skill in human relations, animal nutrition, soil science, crop protection, sales, and agriculture business principles. Courses are held on the Muscatine College Campus from 12:50-2:50 p.m. daily.
MHS Grading Scale/Weighted Grades

- Class rank at Muscatine High School is currently based on Grade Point Average (GPA). In the past, Muscatine High School used a 4.0 GPA Scale. All courses at MHS (unless noted below) will continue to use the scale.

4.0 GPA Scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>GPA</th>
<th>Points</th>
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<tbody>
<tr>
<td>A</td>
<td>4.0</td>
<td>4 points</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
<td>3 points</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
<td>2 points</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
<td>1 point</td>
</tr>
<tr>
<td>F</td>
<td>0.0</td>
<td>0 points</td>
</tr>
</tbody>
</table>

- The following classes will use the 5.0 GPA Scale:
  **Advanced Placement Courses:**
  - Pre AP
  - AP Language and Composition
  - AP Literature and Composition
  - AP Statistics
  - AP Calculus
  - AP Human Geography
  - AP Psychology
  - AP US History
  - AP US Government and Politics
  - AP World History
  - AP Environmental Science
  - AP Biology
  - AP Chemistry
  - AP Physics 1
  - AP Physics 2
  - AP Microeconomics
  - AP Macroeconomics
  - AP Studio Art: Drawing
  - AP Music Theory
  - AP Computer Science Principles
  - AP Seminar
  - AP Research

- Project Lead the Way (PLTW):
  - Introduction to Engineering Design
  - Principles of Engineering
  - Civil Engineering and Architecture
  - Engineering Design and Development
  - Environmental Sustainability

5.0 GPA scale:

<table>
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<tr>
<th>Grade</th>
<th>GPA</th>
<th>Points</th>
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<tr>
<td>A</td>
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<td>B</td>
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<td>4 points</td>
</tr>
<tr>
<td>C</td>
<td>3.0</td>
<td>3 points</td>
</tr>
<tr>
<td>D</td>
<td>2.0</td>
<td>2 points</td>
</tr>
<tr>
<td>F</td>
<td>0.0</td>
<td>0 points</td>
</tr>
</tbody>
</table>

Recognition of Valedictorian(s):
Class of 2016 and Beyond: The Valedictorian(s) will be determined by the highest GPA in the graduating class. Students can potentially earn higher than a 4.00 GPA.
Course Requests
Each spring Muscatine High School works to create a schedule of classes for the following academic year that best meets the needs of our students, while still staying within the parameters of staffing requirements (i.e. number of teachers, class size, teaching schedules, state and federal mandates). We work very hard to accommodate student requests; however, due to the complexity of the scheduling process, sometimes student schedules may need to be adjusted. Please keep in mind that changes in course request or class assignments will not be accepted for any of the following reasons:

- To accommodate a job schedule
- To change teachers
- To change classes to be with friends
- To have first or last period free
- To accommodate a change of mind

Acceptable reasons for schedule changes may include:

- Computer input error
- Scheduling conflicts
- Failure or near failure in a second semester or year course
- Failure to meet a prerequisite for a course
- Teacher and administrative recommendation
- Successful completion of a summer school class

Dropping a Course
Students may request to drop a course for a study hall only if they are enrolled in the maximum number of courses (seven) per semester and only after they have attended and participated in the course of three class periods. Students wishing to drop a course must first discuss it with their parents, teacher and counselor. After a parent/guardian signs the request to drop a course, the counselor and department chair will sign the request as well. A grade of “F” will be reflected on the transcript of a student who chooses to drop a course after the first week of a semester. Student enrolled in yearlong courses will not be allowed to drop at the end of first semester unless the department recommends it.

Level Changes
Students wishing to initiate a level change within the same department must complete the add/drop form and obtain all required signatures (parent/guardian, teacher, department chair, administrator).

Repeating Course(s)
A course may be repeated for credit only when a student has previously received a “D” or an “F.” Both the grade received and the credit earned for repeating the course, as well as the original grade and credit received in the course, will be used in computing the student’s grade point average. The student’s transcript will indicate the first grade and credit earned, as well as the second grade and credit earned. However, the credit received for repeating the course will not count toward satisfying graduation requirements unless the student failed the course.
Incomplete Grades  
An Incomplete represents work not completed by the end of the quarter. Incompletes are given only in extraordinary circumstances. This work must be made up within the first two weeks of the following semester and the Incomplete changed to a grade or a failure. If the work is not made up by the end of the 2-week period, the grade will be changed to an “F.” An Incomplete will prevent eligibility from athletics and activities.

College Admission Requirements  
Criteria for college admission vary greatly. The admission committees consider, to varying degrees, the following:

- Type of high school courses actually taken when compared to the courses available in the high school.
- Quality of the student’s academic record.
- Performance on college admission tests – SAT & ACT.
- Development and maturity of the individual in areas outside the academic classroom.

<table>
<thead>
<tr>
<th>Courses</th>
<th>Highly Selective Colleges</th>
<th>Public University Colleges</th>
<th>Private 4-Year Colleges</th>
<th>Community and Public Colleges</th>
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</thead>
<tbody>
<tr>
<td>English</td>
<td>4 years</td>
<td>4 years</td>
<td>4 years</td>
<td>Varies greatly from an open</td>
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<tr>
<td></td>
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<td>door admission policy to</td>
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<td>selective course requirements</td>
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<tr>
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<td>different departments.</td>
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<tr>
<td>Mathematics</td>
<td>4 years</td>
<td>4 years</td>
<td>4 years</td>
<td></td>
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<tr>
<td>Science</td>
<td>4 years (lab)</td>
<td>3 years</td>
<td>3 years</td>
<td></td>
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<tr>
<td>Social Studies</td>
<td>3-4 Years</td>
<td>3 years</td>
<td>3 years</td>
<td></td>
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<td>Academic Electives</td>
<td>2 years</td>
<td>2 years</td>
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<td></td>
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<tr>
<td>World Languages*</td>
<td>4 years (one)</td>
<td>2 years recommended,</td>
<td>2-4 years</td>
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<td></td>
<td></td>
<td>requirements vary</td>
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College Admission Requirements  
Course requirements for entrance into four different types of colleges are listed above. The academic prerequisites typical of colleges in each of the catalog listed may change from year to year and therefore, should be used only as general minimum guidelines. Specific information may be obtained from high school counselors, college profiles, websites and catalogs, computerized college software programs and college representatives who visit Muscatine High School.

Class Load  
It is required that students in grades 9, 10 and 11 have a minimum of 6-7 academic classes every semester; physical education is required one semester per year. Students in 9th - 12th grade must enroll in a minimum of 5 academic classes. Any exceptions must be approved by administration.
**Transfer Grades**
Transfer grades from accredited public or private schools will be included in class rank and GPA in the same way that the same grades are credited at Muscatine High School.

Transfer grades from non-accredited and alternative programs such as home school instruction or private tutorial instruction will be included on the MHS transcript with a grade of “S.” A maximum of 12 credits of these alternative credits can be counted toward the 25 necessary for an MHS diploma. The remaining credits must be from a state accredited public or accredited private school. The final semester must be through a Muscatine Community School District Program.

**Independent Study**
Students must have approval for an independent study class from the sponsoring teacher, academic department chairperson and the building principal. Independent study classes are limited to one class per semester. Forms and information are available in the guidance office.

**Course Selection Timeline: (subject to change)**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 16</td>
<td>8th Grade Parent Meeting / AP Informational Night</td>
</tr>
<tr>
<td>January 29 - February 16</td>
<td>Counselors meet with 9th-11th grade students for one on one course selection meetings</td>
</tr>
<tr>
<td>February 21 - March 1</td>
<td>Counselors meet with 8th grade students and their parents for one on one course selection meetings</td>
</tr>
<tr>
<td>March/April</td>
<td>Administrators build the Master Schedule</td>
</tr>
<tr>
<td>April 16-27</td>
<td>Counselors will contact students to resolve any potential schedule conflicts</td>
</tr>
<tr>
<td>May 7-18</td>
<td>Student can make an appointment with their counselor to make appropriate course changes based on the circumstances defined above.</td>
</tr>
<tr>
<td>May 21</td>
<td>Students will be able to view their 2018-2019 class schedule</td>
</tr>
</tbody>
</table>
Muscatine High School Graduation Requirements

ENGLISH  
4.0 Credits as follows:
1.0 Credit English 9 or Pre AP
1.0 Credit English 10 or Pre AP
1.0 Credit English 11 or AP
1.0 Credit English 12 or AP

SOC. STUDIES  
3.0 Credits as follows:
1.0 Credit United States History or AP
1.0 Credit Social Studies Electives or AP
0.5 Credit Government or AP
0.5 Credit Economics or AP

SCIENCE  
3.0 Credits
Class of 2018 and Beyond:
1.0 Credit Biology or AP
1.0 Credit Chemistry, or AP
1.0 Credit Physics, or AP

MATH  
3.0 Credits
Class of 2018 and Beyond:
1.0 Credit Algebra I or Pre AP Geometry
1.0 Credit Geometry or Pre AP Alg II
1.0 Credit Alg II or Pre AP Pre Calculus

PHYS ED  
2.0 Credits (1 course per year)

ELECTIVES  
10 Credits
# Graduation Plan: Class of 2018 and Beyond (25 credits)

<table>
<thead>
<tr>
<th>Name:</th>
<th>Post Secondary Plans:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REQUIRED CLASSES</strong></td>
<td><strong>ELECTIVES</strong></td>
</tr>
<tr>
<td><strong>English Requirements—4 Credits</strong></td>
<td>1. ______________________  □ .5=Semester □ 1.0=Year Course</td>
</tr>
<tr>
<td>English 9</td>
<td>2. ______________________  □ .5=Semester □ 1.0=Year Course</td>
</tr>
<tr>
<td>□ Sem 1 □ Sem 2</td>
<td>3. ______________________  □ .5=Semester □ 1.0=Year Course</td>
</tr>
<tr>
<td>English 10</td>
<td>4. ______________________  □ .5=Semester □ 1.0=Year Course</td>
</tr>
<tr>
<td>□ Sem 1 □ Sem 2</td>
<td>5. ______________________  □ .5=Semester □ 1.0=Year Course</td>
</tr>
<tr>
<td>English 11</td>
<td>6. ______________________  □ .5=Semester □ 1.0=Year Course</td>
</tr>
<tr>
<td>□ Sem 1 □ Sem 2</td>
<td>7. ______________________  □ .5=Semester □ 1.0=Year Course</td>
</tr>
<tr>
<td>English 12</td>
<td>8. ______________________  □ .5=Semester □ 1.0=Year Course</td>
</tr>
<tr>
<td>□ Sem 1 □ Sem 2</td>
<td>9. ______________________  □ .5=Semester □ 1.0=Year Course</td>
</tr>
<tr>
<td><strong>Mathematics Requirements—3 Credits</strong></td>
<td>10. ______________________  □ .5=Semester □ 1.0=Year Course</td>
</tr>
<tr>
<td>Algebra I</td>
<td>11. ______________________  □ .5=Semester □ 1.0=Year Course</td>
</tr>
<tr>
<td>□ Sem 1 □ Sem 2</td>
<td>12. ______________________  □ .5=Semester □ 1.0=Year Course</td>
</tr>
<tr>
<td>Geometry</td>
<td>13. ______________________  □ .5=Semester □ 1.0=Year Course</td>
</tr>
<tr>
<td>□ Sem 1 □ Sem 2</td>
<td>14. ______________________  □ .5=Semester □ 1.0=Year Course</td>
</tr>
<tr>
<td>Algebra II</td>
<td>15. ______________________  □ .5=Semester □ 1.0=Year Course</td>
</tr>
<tr>
<td>□ Sem 1 □ Sem 2</td>
<td>16. ______________________  □ .5=Semester □ 1.0=Year Course</td>
</tr>
<tr>
<td><strong>Science Requirements—3 Credits</strong></td>
<td>17. ______________________  □ .5=Semester □ 1.0=Year Course</td>
</tr>
<tr>
<td>Biology</td>
<td>18. ______________________  □ .5=Semester □ 1.0=Year Course</td>
</tr>
<tr>
<td>□ Sem 1 □ Sem 2</td>
<td>19. ______________________  □ .5=Semester □ 1.0=Year Course</td>
</tr>
<tr>
<td>Chemistry</td>
<td>20. ______________________  □ .5=Semester □ 1.0=Year Course</td>
</tr>
<tr>
<td>□ Sem 1 □ Sem 2</td>
<td></td>
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<tr>
<td>Physics</td>
<td></td>
</tr>
<tr>
<td>□ Sem 1 □ Sem 2</td>
<td></td>
</tr>
<tr>
<td><strong>Social Studies Requirements—3 Credits</strong></td>
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<tr>
<td>US History</td>
<td></td>
</tr>
<tr>
<td>□ Sem 1 □ Sem 2</td>
<td></td>
</tr>
<tr>
<td>Other Social Studies □ ________________</td>
<td></td>
</tr>
<tr>
<td>Other Social Studies □ ________________</td>
<td></td>
</tr>
<tr>
<td>□ Government</td>
<td></td>
</tr>
<tr>
<td>□ Economics</td>
<td></td>
</tr>
<tr>
<td><strong>Physical Education—2 Credits (.5 per course)</strong></td>
<td></td>
</tr>
<tr>
<td>9th □ 10th □ 11th □ 12th □</td>
<td></td>
</tr>
</tbody>
</table>
NCAA Division I Initial-Eligibility Requirements

Core Courses: (16)
- Initial full-time collegiate enrollment before August 1, 2016:
  - Sixteen (16) core courses are required (see chart below for subject-area requirements).
- Initial full-time collegiate enrollment on or after August 1, 2016:
  - Sixteen (16) core courses are required (see chart below for subject-area requirements).
    - Ten (10) core courses completed before the seventh semester; seven (7) of the 10 must be in English, math or natural/physical science.
    - These courses/grades are "locked in" at start of the seventh semester (cannot be repeated for grade-point average [GPA] improvement to meet initial-eligibility requirements for competition).
  - Students who do not meet core-course progression requirements may still be eligible to receive athletics aid and practice in the initial year of enrollment by meeting academic redshirt requirements (see below).

Test Scores: (ACT/SAT)
- Students must present a corresponding test score and core-course GPA on the sliding scale (see Page No. 2).
  - SAT: critical reading and math sections.
    - Best subscore from each section is used to determine the SAT combined score for initial eligibility.
  - ACT: English, math, reading and science sections.
    - Best subscore from each section is used to determine the ACT sum score for initial eligibility.
- All ACT and SAT attempts before initial full-time collegiate enrollment may be used for initial eligibility.
- Enter 9999 during ACT or SAT registration to ensure the testing agency reports your score directly to the NCAA Eligibility Center. Test scores on transcripts will not be used.

Core Grade-Point Average:
- Only core courses that appear on the high school’s List of NCAA Courses on the NCAA Eligibility Center’s website (www.eligibilitycenter.org) will be used to calculate your core-course GPA. Use this list as a guide.
- Initial full-time collegiate enrollment before August 1, 2016:
  - Students must present a corresponding test score (ACT sum score or SAT combined score) and core-course GPA (minimum 2.000) on Sliding Scale A (see Page No. 2).
  - Core-course GPA is calculated using the best 16 core courses that meet subject-area requirements.
- Initial full-time collegiate enrollment on or after August 1, 2016:
  - Students must present a corresponding test score (ACT sum score or SAT combined score) and core-course GPA (minimum 2.300) on Sliding Scale B (see Page No. 2).
  - Core-course GPA is calculated using the best 16 core courses that meet both progression (10 before seventh semester; seven in English, math or science; “locked in”) and subject-area requirements.

### DIVISION I Core-Course Requirement (16)
- 4 years of English
- 3 years of math (Algebra I or higher)
- 2 years of natural/physical science (1 year of lab if offered)
- 1 year of additional English, math or natural/physical science
- 2 years of social science
- 4 years of additional courses (any area above, foreign language or comparative religion/philosophy)

### DIVISION I – 2016 Qualifier Requirements
*Athletics aid, practice, and competition
- 16 core courses
  - Ten (10) core courses completed before the start of the seventh semester. Seven (7) of the 10 must be in English, math or natural/physical science.
  - “Locked in” for core-course GPA calculation.
- Corresponding test score (ACT sum score or SAT combined score) and core-course GPA (minimum 2.300) on Sliding Scale B (see Page No. 2).
- Graduate from high school.

### DIVISION I – 2016 Academic Redshirt Requirements
*Athletics aid and practice (no competition)
- 16 core courses
  - No grades/credits “locked in” (repeated courses after the seventh semester begins may be used for initial eligibility).
  - Corresponding test score (ACT sum score or SAT combined score) and core-course GPA (minimum 2.000) on Sliding Scale B (see Page No. 2).
  - Graduate from high school.
## NCAA Division I Sliding Scale

**Sliding Scale A**
*Use for Division I prior to August 1, 2016*

<table>
<thead>
<tr>
<th>Core GPA</th>
<th>SAT Verbal and Math ONLY</th>
<th>ACT Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.00</td>
<td>200</td>
<td>70</td>
</tr>
<tr>
<td>3.50</td>
<td>250</td>
<td>80</td>
</tr>
<tr>
<td>3.25</td>
<td>300</td>
<td>90</td>
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<tr>
<td>3.00</td>
<td>375</td>
<td>100</td>
</tr>
<tr>
<td>1.00</td>
<td>575</td>
<td>120</td>
</tr>
</tbody>
</table>

**Sliding Scale B**
*Use for Division I beginning August 1, 2016*

<table>
<thead>
<tr>
<th>Core GPA</th>
<th>SAT Verbal and Math ONLY</th>
<th>ACT Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.50</td>
<td>200</td>
<td>70</td>
</tr>
<tr>
<td>3.25</td>
<td>250</td>
<td>80</td>
</tr>
<tr>
<td>3.00</td>
<td>300</td>
<td>90</td>
</tr>
<tr>
<td>1.00</td>
<td>575</td>
<td>120</td>
</tr>
</tbody>
</table>

For more information, visit [www.eligibilitycenter.org](http://www.eligibilitycenter.org) or [www.2point3.org](http://www.2point3.org).
Division II Initial-Eligibility Requirements

Core Courses

- Division II currently requires 16 core courses. See the chart below.
- Beginning August 1, 2018, to become a full or partial qualifier for Division II, all college-bound student-athletes must complete the 16 core-course requirement.

Test Scores

- Division II currently requires a minimum SAT score of 820 or an ACT sum score of 68. Beginning August 1, 2018, Division II will use a sliding scale to match test scores and core-course grade-point averages (GPA). The sliding scale for those requirements is shown on Page No. 2 of this sheet.
- 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 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). Only courses that appear on your school’s approved List of NCAA Courses will be used in the calculation of the core GPA. Use the list as a guide.
- The current Division II core GPA requirement is a minimum of 2.000. Division II core GPA required to be eligible for competition on or after August 1, 2018, is 2.200 (corresponding test-score requirements are listed on the Sliding Scale on Page No. 2 of this sheet).
- The minimum Division II core GPA required to receive athletics aid and practice as a partial qualifier on or after August 1, 2018, is 2.000 (corresponding test-score requirements are listed on the Sliding Scale on Page No. 2 of this sheet).
- Remember, the NCAA core GPA is calculated using NCAA core courses only.

DIVISION II
16 Core Courses

<table>
<thead>
<tr>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 years of English.</td>
</tr>
<tr>
<td>2 years of mathematics (Algebra I or higher).</td>
</tr>
<tr>
<td>2 years of natural/physical science (1 year of lab if offered by high school).</td>
</tr>
<tr>
<td>3 years of additional English, mathematics or natural/physical science.</td>
</tr>
<tr>
<td>2 years of social science.</td>
</tr>
<tr>
<td>4 years of additional courses (from any area above, foreign language or comparative religion/philosophy).</td>
</tr>
</tbody>
</table>


The Muscatine Honors Program provides recognition and support for the students taking the most rigorous core courses at MHS. Students are schedule into Advanced Placement™ classes in the core subjects of mathematics, language arts, social studies and science.

Successful completion of all the honors courses with a weighted GPA of 3.5 or greater will result in a special designation on the transcript and the MHS diploma at graduation. Course substitutions may be permitted and must be approved by administration if different from the Core Course Sequence. Contact Chris Nienhaus, Assistant Principal at MHS, regarding course substitutions.

Successful completion of the AP Seminar and AP Research courses will be designated on the Common Application for college admission as an AP Capstone diploma.

**Appeals:** Students who narrowly miss the eligibility requirements may appeal the decision to the high school principal. The deadline for appeals for students currently enrolled in the district is the end of third quarter. The high school principal will review the appeals, in consultation with other district personnel as appropriate. The review may include the collection of additional data to make a final determination of eligibility. This data could include second semester grades. Spring standards and benchmark test scores, a student-writing portfolio, teacher input and eighth grade Aspire scores and grades.

**Honors Course of Study**

The required core course sequence of study for the Honors Program at Muscatine High School are outlined on the adjacent page.

An overall GPA of 3.5 is required each semester to remain in the Honors Program. Students must take the Advanced Placement (AP) Exam for any required AP courses. Honors Program.
Core Course Sequence (courses to be taken in addition to electives):

**Grade 9**
- AP Prep Biology
- Pre-AP English 9
- AP Human Geography
- Pre-AP Geometry

**Grade 10**
- AP World History
- AP Biology or AP Chemistry or AP Physics
- Pre-AP English 10
- Pre-AP Algebra II/Pre-AP Pre-Calculus
- AP Seminar or Rigorous Elective

**Grade 11**
- AP US History
- AP Language and Composition
- AP Biology or AP Chemistry or AP Physics
- Pre-AP Pre-Calculus/AP-Calculus
- AP Seminar/AP Research or Rigorous Elective

**Grade 12**
- AP Government
- AP Literature and Composition
- AP Biology or AP Chemistry or AP Physics
- AP Calculus or AP Statistics
- AP Research or Rigorous Elective
MHS Scholar Designation

The Scholar Designation enables students who demonstrate dedication and high achievement in a specific curricular area to be recognized at graduation. These earned designations will be noted on the student’s transcript and diploma. Scholars will have completed a specific number of credits and courses within a subject area, earned a high grade point average and successfully completed a capstone experience which incorporates the skills and knowledge learned through their high school coursework.

Requirements

Following are the general requirements for each Scholar Designation:

➢ Overall GPA: 3.0
➢ Content Area GPA: 3.50
➢ All credits in the area of specialty must be completed for a letter grade to qualify for Scholar Designation.
➢ Completion of Capstone Experience
➢ Students must take the Advanced Placement (AP) Exam for any required AP courses. Detailed requirements for each of the curricular areas are listed in the Muscatine High School Curriculum Guide.

Capstone Experience

The student-designed capstone experience is the student’s opportunity to demonstrate extraordinary commitment and understanding of the curricular area. It will be a synthesis of the important content, skills, and knowledge that are of significance in the student’s area of focus. The capstone will be evaluated by how the student demonstrates constructions of new knowledge, how the student uses elaborate communication techniques to explain the project and how the project connects to the student’s life.

The individual capstone proposal must be approved in advance in May of the junior year. Capstone experiences may include research, an internship, etc. A jury of three (the capstone advisor, a Muscatine High School administrator and an instructional coach) will arbitrate a presentation of the capstone experience prior to May 15 of the senior year.

MHS Participating Departments (Each Participating Department will have a List of Requirements after their Course Descriptions.)

❖ Fine Arts
❖ Language Arts
❖ Mathematics
❖ Science
❖ Social Studies
❖ Industrial & Engineering Technology
❖ Agricultural Science
### Course Lists

- BOLD courses indicate Concurrent Enrollment with Muscatine Community College
- "Core Elective" is an elective in the areas of English, Math, Science, Social Studies or Foreign Language
- *weighted grading scale
- 🏫 NCAA Approved Core Course

#### Agricultural Science Classes—See page 27-29 for course descriptions

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credit</th>
<th>Grade(s)</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGR100</td>
<td>Agriculture I</td>
<td>1.0</td>
<td>9,10,11,12</td>
<td></td>
</tr>
<tr>
<td>AGR106</td>
<td>Agriculture II</td>
<td>1.0</td>
<td>10,11,12</td>
<td></td>
</tr>
<tr>
<td>AGR101</td>
<td>Horticulture I</td>
<td>1.0</td>
<td>9,10,11,12</td>
<td></td>
</tr>
<tr>
<td>AGR102</td>
<td>Horticulture II</td>
<td>1.0</td>
<td>10,11,12</td>
<td>Horticulture I</td>
</tr>
<tr>
<td>AGR107</td>
<td>Advanced Animal Science (block)</td>
<td>1.0</td>
<td>10,11,12</td>
<td>Ag I or Permission of Instructor</td>
</tr>
<tr>
<td>AGR109</td>
<td>Horse &amp; Specialty Animal Science (block)</td>
<td>1.0</td>
<td>10,11,12</td>
<td>Ag I or Permission of Instructor</td>
</tr>
<tr>
<td>AGR500</td>
<td>Forestry and Wildlife Management</td>
<td>1.0</td>
<td>9,10,11,12</td>
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</tr>
<tr>
<td>AGR104</td>
<td>Animal Nutrition &amp; Management (block)</td>
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<tr>
<td>AGR108</td>
<td>Livestock and Horse Eval (block)</td>
<td>1.0</td>
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<td>Ag I</td>
</tr>
<tr>
<td>AGR502</td>
<td>Equipment Repair &amp; Maintenance</td>
<td>0.5</td>
<td>9,10,11,12</td>
<td>Power Mechanics or Ag I</td>
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<tr>
<td>AGR110</td>
<td>Residential/Agricultural Wiring</td>
<td>0.5</td>
<td>9,10,11,12</td>
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<tr>
<td>AGR600</td>
<td>Agriculture Work Based Learning</td>
<td>3.0</td>
<td>12</td>
<td>Six Semesters of Ag Classes</td>
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</table>

#### Art Classes—See page 30-32 for course descriptions

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
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<th>Grade(s)</th>
<th>Prerequisite</th>
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<tbody>
<tr>
<td>ART103</td>
<td>Drawing / Painting I</td>
<td>0.5</td>
<td>9,10,11,12</td>
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<tr>
<td>ART105</td>
<td>Sculpture I</td>
<td>0.5</td>
<td>9,10,11,12</td>
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<tr>
<td>ART101</td>
<td>Digital Art I</td>
<td>0.5</td>
<td>9,10,11,12</td>
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</tr>
<tr>
<td>ART104</td>
<td>Drawing / Painting II</td>
<td>0.5</td>
<td>9,10,11,12</td>
<td>Drawing / Painting I</td>
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<tr>
<td>ART109</td>
<td>Sculpture II</td>
<td>0.5</td>
<td>9,10,11,12</td>
<td>Sculpture I</td>
</tr>
<tr>
<td>ART505</td>
<td>Digital Art II</td>
<td>0.5</td>
<td>9,10,11,12</td>
<td>Digital Art I</td>
</tr>
<tr>
<td>ART106</td>
<td>Animation</td>
<td>0.5</td>
<td>9,10,11,12</td>
<td>Drawing/Painting I or Sculpture I</td>
</tr>
<tr>
<td>ART600</td>
<td>Independent Art Studio</td>
<td>0.5</td>
<td>10,11,12</td>
<td>Consent of Instructor</td>
</tr>
<tr>
<td>ART601</td>
<td>Independent Art Studio II</td>
<td>0.5</td>
<td>10,11,12</td>
<td>Independent Art Studiod I and Consent of Instructor</td>
</tr>
<tr>
<td>ART102</td>
<td>AP Studio Art Drawing*</td>
<td>1.0</td>
<td>11,12</td>
<td>Drawing/Painting I and Consent of Instructor</td>
</tr>
<tr>
<td>ART107</td>
<td>AP Studio Art 2D Art*</td>
<td>1.0</td>
<td>11,12</td>
<td>Drawing/Painting I, Digital Art I or Consent of Instructor</td>
</tr>
<tr>
<td>ART108</td>
<td>AP Studio Art 3D Art*</td>
<td>1.0</td>
<td>11,12</td>
<td>Drawing/Painting I, Digital Art I or Conesent of Instructor</td>
</tr>
<tr>
<td>ART500</td>
<td>Film as Literature</td>
<td>0.5</td>
<td>10,11,12</td>
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#### Business Classes—See pages 33-34 for course descriptions

<table>
<thead>
<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credit</th>
<th>Grade(s)</th>
<th>Prerequisite</th>
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<tbody>
<tr>
<td>BUS500</td>
<td>Intro to Business</td>
<td>0.5</td>
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<tr>
<td>BUS504</td>
<td>Marketing</td>
<td>0.5</td>
<td>9,10,11,12</td>
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<tr>
<td>BUS101</td>
<td>Financial Accounting</td>
<td>1.0</td>
<td>9,10,11,12</td>
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</tr>
<tr>
<td>BUS201</td>
<td>Managerial Accounting</td>
<td>1.0</td>
<td>10,11,12</td>
<td>Financial Accounting</td>
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<tr>
<td>BUS100</td>
<td>Computer Applications I</td>
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### Family and Consumer Science Classes—See page 35 for course descriptions

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<td>FAM500</td>
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### Industrial and Engineering Technology Classes—See pages 36-40 for course descriptions

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### English/Language Arts/ESL Classes—See pages 41-45 for course descriptions

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<td>English 10</td>
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<td>10</td>
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<td>ENG119</td>
<td>Pre AP English 10*</td>
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<td>English 11</td>
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<tr>
<td>AP Research (elective)</td>
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<td>Probability and Statistics</td>
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<tr>
<td>Algebra II</td>
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<tr>
<td>Honors Alg II and Honors Geo</td>
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<tr>
<td>Honors Pre Calculus or Honors Alg II and Trig</td>
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<tr>
<td>Alg II and Geo.</td>
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<td>Geometry</td>
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<tr>
<td>Audition</td>
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<td>Participation in MUS100 level course.</td>
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### Grade(s)

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### Physical Education Classes—See page 51-52 for course descriptions

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<td>Freshman PE &amp; Health</td>
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<td>Competitive Team Games and Rec</td>
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<tr>
<td>Fundamental Team Games and Rec</td>
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<td>Cardiorespiratory Fitness</td>
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<tr>
<td>Fitness Walking</td>
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<td>Personal Fitness</td>
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<tr>
<td>Intro to Strength Training</td>
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<td>Strength Training Performance</td>
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<td>Advanced Strength Training 1st Sem</td>
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### Project Lead the Way Classes
See page 53 for course descriptions

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### Science Classes
See page 54-57 for course descriptions

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### Social Studies Classes
See pages 58-61 for course descriptions

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<td>SOC502</td>
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### World Language Classes
See pages 62-64 for course descriptions

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<td>Chinese III</td>
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<tr>
<td>Number</td>
<td>Course Title</td>
<td>Credit</td>
<td>Grade(s)</td>
<td>Prerequisite</td>
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<tr>
<td>WOR104</td>
<td>French I</td>
<td>1.0</td>
<td>9,10,11,12</td>
<td>French I</td>
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<tr>
<td>WOR105</td>
<td>French II</td>
<td>1.0</td>
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<tr>
<td>WOR106</td>
<td>French III</td>
<td>1.0</td>
<td>11,12</td>
<td>French III</td>
</tr>
<tr>
<td>WOR107</td>
<td>French IV</td>
<td>1.0</td>
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<td>French III</td>
</tr>
<tr>
<td>WOR108</td>
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<tr>
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<td>WOR110</td>
<td>German III</td>
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<td>11,12</td>
<td>German III</td>
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<tr>
<td>WOR111</td>
<td>German IV</td>
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<td>German III</td>
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<td>WOR113</td>
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<td>WOR114</td>
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**Other Classes**—See page 64 for course descriptions

<table>
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<tr>
<th>Number</th>
<th>Course Title</th>
<th>Credit</th>
<th>Grade(s)</th>
<th>Prerequisite</th>
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<tr>
<td>OTH113</td>
<td>Peer Mentoring</td>
<td>1.0*</td>
<td>10,11,12</td>
<td>*Or Silver Cord Hours</td>
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<td>OTH101</td>
<td>Gifted and Talented Seminar (online)</td>
<td>1.0</td>
<td>9,10,11,12</td>
<td>Identified G/T</td>
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</table>
Agricultural Science Classes

**AGR100 Agriculture I**
1.0 Credit  Year Course  9,10,11,12
This course covers orientation to agriculture careers, Introduction to record keeping, parliamentary procedure, production and selection of beef, sheep, swine and horses. This introductory class is recommended for all Agriculture classes and pathways.  
Counts as an elective credit.  
No prerequisite

**AGR106 Agriculture II (MCC: Soil Science)**
1.0 Credit  Year Course  10,11,12
This course covers soil science, sales, parliamentary procedure, wholesale and retail meats, Agronomy, and production of dairy and dairy products.  
Counts as an elective credit. Student can also receive AGA182 through EICC.  
Prerequisite: Agriculture I or consent of instructor  
Requires an MCC Admission Application and proficient assessment scores.

1.0 Credit  Year Course  9,10,11,12
Topics include plant physiology, turf management, landscape design, starting plants, greenhouse management, hort-business, floral, garden establishment, plant varieties and horticulture careers. Student can also receive MCC AGH130 and AGH221 through EICC.  
Counts as an elective credit.  
Requires an MCC Admission Application and proficient assessment scores.

**AGR102 Horticulture II (MCC: Landscape Design Tech., Turf Management, Floral Design I, Crop Protection)**
1.0 Credit  Year Course  10,11,12
Students will design and implement a landscape plan and participate in field trips. Topics covered include architectural landscape design, tree and shrub identification/installation, market place pricing, maintenance of equipment, fertilizer plans, floral design, bedding plants, marketing, equipment, fertilizer. Student can also receive MCC AGH152, AGH115, AGH139, AGH254 through EICC  
Counts as an elective credit.  
Prerequisite: Horticulture I  
Requires an MCC Admission Application and proficient assessment scores.

**AGR107 Advanced Animal Science (MCC: Advanced Animal Science, Beef Production)**
1.0 Credit  Semester Course/Block  10,11,12
Topics include advanced livestock selection and physiology; animal nutrition and ration formulation; quantitative genetics and animal breeding; livestock diseases, animal environment. Students receive MCC credit for successful completion of this course.  
Counts as an elective credit. Student can also receive MCC AGS554 and AGS119 through EICC.  
Prerequisite: Agriculture I or consent of instructor  
Requires an MCC Admission Application and proficient assessment scores.

**AGR109 Horse and Speciality Animal Science**
1.0 Credit  Semester Course/Block  10,11,12
Formerly Advanced Horse Science. Topics include nutrition, diseases and horse breeding. Students will learn the qualities necessary for high quality horse stock. Specialty, show, companion animals and basic animal care will be covered.  
Counts as an elective credit.  
Prerequisite: Agriculture I or consent of instructor
1.0 Credit Semester Course/Block 10,11,12  
Formely Livestock Marketing & Merchandising. Topics include livestock feeding and nutrition practices. Students will use information to make decisions on caring and raising livestock. Class will also focus on management of livestock herds and facilities.  
Counts as an elective credit. Students can also receive MCC AGS 315 through EICC.  
Prerequisite: Agriculture I or consent of instructor  
Requires an MCC Admission Application and proficient assessment scores.

AGR108 Livestock and Horse Evaluation  
1.0 Credit Semester Course/Block 10,11,12  
Students will learn selection, evaluation and classification of breeding and market animals. Curriculum will use comparative evaluation of live animals and carcasses as well as use of production records, production test data, and sire summaries in the selection process. Students will also learn the use of oral reasons to support evaluation. Basic handling and management will also be covered.  
Counts as an elective credit.  
Prerequisite: Agriculture I or consent of instructor

AGR500 Forestry and Wildlife Management (MCC: Fisheries Management, Wildlife Management, Wildlife Habitat)  
1.0 Credit Year Course 9,10,11,12  
Topics include forest management; tree planting; tree care, harvesting and marketing; wildlife management as recreation; Aquaculture, and hunting and fishing laws and safety.  
Counts as an elective credit. Students can also receive MCC CNS131, CNS132 CNS137 through EICC  
No Prerequisite  
Requires an MCC Admission Application and proficient assessment scores.

AGR502 Equipment Repair & Maintenance (MCC: Equipment Repair)  
0.5 Credit Semester Course 9,10,11,12  
Formely Machinery Maintenance & Operation. Students learn the operational procedures for a shop or agricultural environment. They will learn basic maintenance and operation of industry relevant equipment.  
Counts as an elective  
Prerequisite: Power Mechanics or Agriculture I  
Requires an MCC Admission Application and proficient assessment scores.

AGR110 Residential/Agricultural Wiring  
0.5 Credit Semester Course 9,10,11,12  
Students learn the skills and knowledge that are specifically applicable to the tools and equipment used in the agricultural industry. While learning to apply basic industrial knowledge and skills (engine mechanics, power systems, welding, and carpentry, among others) students may explore a broad range of topics including the operation, mechanics and care of farm tools and machines; the construction and repair of structures integral to farm operations; a study of electricity and power principles; and safety procedures.  
Counts as an elective credit  
No Prerequisite

AGR501 Agriculture Work-based Learning  
3.0 Credits Year Course 12  
Arranged with Ag instructor.  
Counts as elective credit.  
Prerequisite: Consent of instructor
1. Must take at least four years (4 credits) of courses from the Agricultural Courses at Muscatine.
2. Have a general overall GPA of at least 3.0.
3. Have a GPA of 3.5 in the Agricultural courses.
4. Must exhibit a “Capstone” experience.

The Capstone experience for each Scholar will be a project that exhibits a deep level of understanding of their area of interest. This Capstone will be the synthesis of the important content, skills, or knowledge that are of vital significance and importance in the Scholar’s area of focus. The Capstone will be evaluated through the lenses of three standards: a) Construction of Knowledge, b) Elaborate Written Communication, and c) Connections to the Student’s Life. Students will develop a Capstone proposal based on the following criteria.

**Standard 1: Construction of Knowledge**
The task asks students to interpret, analyze, synthesize or evaluate information in writing about a topic, rather than merely reproducing the information. To score high, the task should require interpretation, analysis, synthesis, or evaluation of information that goes deeper than simple familiarity with the information.

**Standard 2: Elaborated Written Communication***
The task asks students to draw conclusions, make generalizations or arguments and support them through extended writing. Explicitly call for generalization AND support. The task asks students, using narrative or expository writing, to draw conclusions, make generalizations or arguments, AND to substantiate them with examples, summaries, illustrations, details or reasons.

*Elaborated communications may be most often evident in National FFA Career Development Events (Contest), an Iowa Degree, or a Proficiency Award, but may take other forms.

**Standard 3: Connections to Students’ Lives**
The task asks students to connect the topic to their lives. The task asks students, using narrative or expository writing, to connect the topic to experience, observations, feelings or situations significant to their lives.

The individual Capstone proposal should be approved in advance in May of the junior year. Depending on how students perform in CDE’s etc. students can sign up in the fall of the senior year. A presentation of the Capstone experience will be adjudicated prior to May 15th of the senior year by a jury of three composed of their Capstone advisor, a Muscatine administrator, and a teaching and learning administrator (as available). The Capstone advisor will be one of the Agricultural Instructors.
### Visual Arts Classes

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Description</th>
<th>Credits</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART103</td>
<td><strong>Drawing / Painting I</strong>&lt;br&gt;An introduction to the art principles and elements which guide to the creation of original works in drawing and painting. This is an introductory class to help students seeking 2D studio arts pursuits as well as the novice artist. Introductory level.&lt;br&gt;Counts as an elective credit.&lt;br&gt;No prerequisite required</td>
<td>0.5</td>
<td>Introductory</td>
</tr>
<tr>
<td>ART105</td>
<td><strong>Sculpture I</strong>&lt;br&gt;An introduction to the art principles and elements which guide to the creation of original works in the area of sculpture and ceramics. This is an introductory class to help students seeking 3D studio arts pursuits as well as the novice artist. Introductory level.&lt;br&gt;Counts as an elective credit.&lt;br&gt;No prerequisite required</td>
<td>0.5</td>
<td>Introductory</td>
</tr>
<tr>
<td>ART101</td>
<td><strong>Digital Art I (MCC: Photoshop)</strong>&lt;br&gt;An introduction to the art principles and elements which guide to the creation of original work using photography and Photoshop. This is an introductory class to help students seeking 2D digital arts pursuits as well as the novice artist. Introductory level.&lt;br&gt;Counts as an elective credit.&lt;br&gt;No prerequisite required</td>
<td>0.5</td>
<td>Introductory</td>
</tr>
<tr>
<td>ART104</td>
<td><strong>Drawing / Painting II</strong>&lt;br&gt;A continuation of the use of art principles and elements which guide to the creation of original works in drawing and painting. This is a continuation of Drawing /Painting I techniques and methods. Developmental level.&lt;br&gt;Counts as an elective credit.&lt;br&gt;Art 100 (Drawing/Painting I) Prerequisite</td>
<td>0.5</td>
<td>Developmental</td>
</tr>
<tr>
<td>ART109</td>
<td><strong>Sculpture II</strong>&lt;br&gt;A continuation of the use of art principles and elements which guide to the creation of original works in the area of sculpture and ceramics. This is a continuation of Sculpture I techniques and methods. Developmental level.&lt;br&gt;Counts as an elective credit.&lt;br&gt;Art 101 (Sculpture I) Prerequisite</td>
<td>0.5</td>
<td>Developmental</td>
</tr>
<tr>
<td>ART505</td>
<td><strong>Digital Art II (Illustrator)</strong>&lt;br&gt;A continuation of the principles and elements which guide to the creation of original work using Photoshop and will focus on Adobe Illustrator. This class will use skills and techniques for students seeking 2D digital arts pursuits as well as the novice artist. Developmental level&lt;br&gt;Counts as an elective credit.&lt;br&gt;Art 102 (Digital Art I) Prerequisite</td>
<td>0.5</td>
<td>Developmental</td>
</tr>
<tr>
<td>ART106</td>
<td><strong>Animation</strong>&lt;br&gt;A focus on various animation techniques from stop motion to digital animation programs. Students will create in both 2D and 3D forms digitally.&lt;br&gt;Developmental level.&lt;br&gt;Counts as an elective credit.&lt;br&gt;Art 100 (Drawing/Painting I) or Art 101 (Sculpture I) Prerequisite</td>
<td>0.5</td>
<td>Developmental</td>
</tr>
</tbody>
</table>
ART600  Independent Art Studio I
0.5 Credit  Semester Course  10,11,12
Students learn advanced techniques in the art genre of choice. Daily attendance is required. Topics may include ceramics, sculpture, printmaking, drawing, painting, crafts and fibers. Advanced level.
Counts as an elective credit.
Prerequisite: Consent of Instructor

ART601  Independent Art Studio II
0.5 Credit  Semester Course  10,11,12
Students learn advanced techniques in the art genre of choice. Daily attendance is required. Topics may include ceramics, sculpture, printmaking, drawing, painting, crafts and fibers. Advanced level.
Counts as an elective credit.
Prerequisite: Consent of Instructor

ART102  AP Studio Art Drawing (*weighted grading scale)
1.0 Credit  Year Course  11,12
The AP Studio Art portfolios are designed for students who are seriously interested in the practical experience of art. AP Studio Art is not based on a written exam; instead, students submit portfolios for evaluation at the end of the school year. The AP Studio Art Program consists of a portfolio Drawing — corresponding to the most common college foundation courses in drawing. Advanced level.
Counts as elective credit
Prerequisite: Drawing/Painting I or Consent of Instructor

ART107  AP Studio Art 2D Art (*weighted grading scale)
1.0 Credit  Year Course  11,12
The AP Studio Art portfolios are designed for students who are seriously interested in the practical experience of art. AP Studio Art is not based on a written exam; instead, students submit portfolios for evaluation at the end of the school year. The AP Studio Art Program consists of a portfolio 2D — corresponding to the most common college foundation courses in printmaking, digital art and printmaking. Advanced level.
Counts as elective credit
Prerequisite: Drawing/Painting I, Digital Art I or Consent of Instructor

ART108  AP Studio Art 3D Art (*weighted grading scale)
1.0 Credit  Year Course  11,12
The AP Studio Art portfolios are designed for students who are seriously interested in the practical experience of art. AP Studio Art is not based on a written exam; instead, students submit portfolios for evaluation at the end of the school year. The AP Studio Art Program consists of a portfolio 3D — corresponding to the most common college foundation courses in ceramics and sculpture. Advanced level.
Counts as elective credit
Prerequisite: Drawing/Painting I, Digital Art I or Consent of Instructor

ART500  Film as Literature  (MCC: Introduction to Film)
0.5 Credit  Semester Course  10,11,12
Formerly Art of the Film. College level reading/writing. Students learn to examine film on a critical level and apply analytical skills. Topics include editing, color, visual design, cinematography, fictional and dramatic elements and thematic elements.
Counts as an elective credit and MCC DRA 110
No Prerequisite
Requires an MCC Admission Application and proficient assessment scores.
1. Must take at least four years (4 credits) in the area of fine arts in grades 9-12 at MHS.
2. Complete the AP Studio Art or AP Music Theory (pending music staff AP certification).
3. Have a general overall GPA of at least 3.5.
4. Have a GPA of 4.0 in all fine arts courses.
5. Must exhibit a “Capstone” experience.

The Capstone experience for each Scholar will be a project that exhibits a deep level of understanding of their area of interest. This Capstone will be the synthesis of the important content, skills, or knowledge that are of vital significance and importance in the Scholar’s area of focus. The Capstone will be evaluated through the lenses of three standards: a) Construction of Knowledge, b) Elaborate Written Communication, and c) Connections to the Student’s Life. Students will develop a Capstone proposal based on the following criteria.

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The task asks students to interpret, analyze, synthesize or evaluate information in writing about a topic, rather than merely reproducing the information. To score high, the task should require interpretation, analysis, synthesis, or evaluation of information that goes deeper than simple familiarity with the information.

**Standard 2: Elaborated Written Communication**
The task asks students to draw conclusions, make generalizations or arguments and support them through extended writing. Explicitly call for generalization AND support. The task asks students, using narrative or expository writing, to draw conclusions, make generalizations or arguments, AND to substantiate them with examples, summaries, illustrations, details or reasons.
Business Classes

BUS500 Introduction to Business
0.5 Credit  Semester Course  9,10,11,12
This course is designed as an introductory class to learn general business terminology, concepts, and current business issues, with the intent of helping students develop a viable business vocabulary, foster critical and analytical thinking, and refine business decision-making skills that are relevant to the future workforce and business leaders.
Counts as an elective credit.
No prerequisite

BUS504 Marketing
0.5 Credit  Semester Course  9,10,11,12
Students learn the basic concepts of the world of marketing. Topics include advertising, promotion, pricing, product development, global marketing and ethics.
Counts as an elective credit.
No prerequisite

BUS101 Financial Accounting
1.0 Credit  Year Course  9,10,11,12
Formerly Accounting I. Financial Accounting is recommended for all students interested in pursuing a business career at the post high school level. Students learn how to systematically and accurately keep track of money that a business earns and spends. The accounting cycle is presented as it pertains to proprietorships and corporations. Accounting challenges students to develop skills they will use in life as well as a career in the business or accounting field. All students, regardless of the professions they choose, can benefit from accounting instruction since it is an integral part of every business and organization.
Counts as an elective credit.
No prerequisite

BUS201 Managerial Accounting
1.0 Credit  Year Course  10,11,12
Formerly Accounting II. This second year course is for students with career objectives in accounting or business. A review of the entire accounting cycle using a departmental business allows students to begin this course by reviewing many of the topics learned in the first year course. The remaining parts of the course will explore various aspects of accounting including adjustments, valuation, corporate, management, and other accounting systems.
Counts as an elective credit.
Prerequisite: Accounting I or Financial Accounting

BUS100 Computer Applications I
0.5 Credit  Semester Course  9,10,11,12
Formerly Computer Applications 1. Students will use Microsoft Word, PowerPoint, and Excel to prepare word processing documents, presentations and spreadsheets. Projects in Word, PowerPoint, and Excel will be required.
Counts as an elective credit.
No Prerequisite

BUS200 Computer Applications II (MCC: Basic Word Processing, Basic Spreadsheets, Power Point, Outlook)
0.5 Credit  Semester Course  9,10,11,12
Formerly Computers Applications II. This course will be a continuation of Microsoft Word, PowerPoint, Excel, and Outlook. to prepare advanced word processing documents, presentations, and spreadsheets. Projects in Word, PowerPoint, and Excel will be required.
Counts as an elective credit and, after completion of Computer Applications I and II students will receive MCC BCA 129, 207, 147.
Prerequisite: Computer Applications I or Introduction to Computers
Requires an MCC Admission Application and proficient assessment scores.

BUS103 Business and Personal Law I
0.5 Credit  Semester Course  11,12
This class will cover the ethical basis for law, Criminal Law, how law addresses the major problems in society such as underage drinking and
domestic violence, Court structure, Trial procedure, and Contract Law. Students will engage in a mock trial involving a car accident to reinforce these concepts.

Counts as elective credit
No prerequisite

BUS203 Business and Personal Law II
0.5 Credit Semester Course 11,12
This class extends the concepts built in Business and Personal Law I, but focuses on trial preparation and procedure. In this class you will participate in three trials. One trial will be a civil trial and two trials will be criminal. Students will learn the major components of Federal Rules of Evidence, how to enter evidence in trial, how to impeach a witness, and how to confidently advocate. In addition, the class will cover marriage and divorce, warranties, consumer protection, personal property and bailments, employment contracts, employment, and wills and intestacy.

Counts as elective credit
Prerequisite: Business and Personal Law I

BUS104 AP Microeconomics (*weighted grading scale)
0.5 Credit Semester Course 11,12
A thorough understanding of the principles of economics that apply to the functions of individual decision makers in the economy. It places primary emphasis on the nature and functions of product markets, and includes the study of factor markets and the role of government in promoting efficiency and equity.

Counts as Economics Social Studies Requirement or core elective
No prerequisite

BUS204 AP Macroeconomics (*weighted grading scale)
0.5 Credit Semester Course 11,12
Macro gives students an understanding of the principles of economics that apply to the economy as a whole. This class places emphasis on national income and price determination, and also develops students’ familiarity with economic performance measures, economic growth, and international trade.

Counts as Economics Social Studies Requirement or core elective
No prerequisite

BUS105 Economics
0.5 Credit Semester Course 11,12
Economics is a one semester course which teaches the fundamental concepts of Economics and Financial Literacy. The students will be able to understand basic economic theory, analyze the role of demand–supply–market clearing price, and discover the importance of personal finance to develop their personal financial plan. This class is largely project oriented and has an emphasis on practical application of material covered.

Counts as Economics Social Studies Requirement
No Prerequisite

BUS501 Intro to Personal Finance
0.5 Credit Semester Course 9,10,11,12
This course is designed to give students a general knowledge of personal & business finance, as well as business terms, concepts, and procedures used in day-to-day operation in the home or office. This course will inform students how individual choices directly influence occupational goals and future earnings potential. Real world topics covered will include income, money management, spending and credit, as well as saving and investing. Students will design personal and household budgets utilizing checking and saving accounts, gain knowledge in finance, debt and credit management, and evaluate and understand insurance and taxes.

Counts as elective credit
No prerequisite

BUS505 Business Work-Based Learning
3.0 Credit Year Course 12
See instructor for information and applications.

Counts as elective credit
Prerequisite: Three Credits in Business Classes and Consent of Instructor
Family and Consumer Science Classes

FAM100 Culinary Arts I
This introductory foods course is planned to educate students on food nutrition development, cooking skills, and techniques as they make lifetime health and nutrition choices. Students will learn and understand cooking terms and their application to achieve best results in food preparation.

0.5 Credit  Semester Course  9,10,11,12
Counts as an elective credit.
No prerequisite

FAM200 Culinary Arts II
This foods course offers the student the opportunity to continue developing their cooking skills while learning about international foods and altering recipes to meet nutritional needs, special diets, and meal planning. The focus will also begin to practice techniques that will improve “eye appeal” of foods.

0.5 Credit  Semester Course  9,10,11,12
Counts as an elective credit.
Prerequisite: Culinary Arts I

FAM101 Child Development I
The goal of this course is to explore current issues and skills in the care of young children. Areas of study will include family structures with single parenting, foster parenting, and adoption, also, teen parenting, heredity, birth defects, pregnancy and birth will be covered. Emphasis will include prenatal development through birth and parenting responsibilities. Students will be assigned care of the infant simulator “Real Care Baby” for a weekend or weekday overnight with reflection.

0.5 Credit  Semester Course  9,10,11,12
Counts as an elective credit.
No prerequisite

FAM201 Child Development II
The goal of this course is to study children from birth through adolescence including physical, intellectual, emotional, and social development. Other areas of study will include health and safety, child abuse and neglect, and children’s literature.

0.5 Credit  Semester Course  9,10,11,12
Counts as an elective credit.
Prerequisite: Child Development I

FAM500 Housing
This course investigates housing choices and the design of living areas. Students explore, apply, and evaluate the elements and principles of design, wall and floor treatments, furniture styles and arrangement, housing types available, floor plan design, landscaping, and financial aspects related to housing, including renting vs buying.

0.5 Credit  Semester Course  11,12
Counts as an elective credit.
No prerequisite

FAM502 Marriage and Family
This course is intended to prepare you for your own role in the family, its structures, and functions. It is intended to present a more balanced understanding of choices you will be making as you prepare for adulthood. The objective is to apply what you learn in class to your own life, and better understand what you personally want in your future family and relationship experiences.

0.5 Credit  Semester Course  11,12
Counts as an elective credit.
No prerequisite
Industrial and Engineering Technology Classes

**AGR110 Residential/Agricultural Wiring**
0.5 Credit  
Semester Course  9,10,11,12  
Students learn the skills and knowledge that are specifically applicable to the tools and equipment used in the agricultural industry. While learning to apply basic industrial knowledge and skills (engine mechanics, power systems, welding, and carpentry, among others) students may explore a broad range of topics including the operation, mechanics and care of farm tools and machines; the construction and repair of structures integral to farm operations; a study of electricity and power principles; and safety procedures.  
Counts as an elective credit  
No Prerequisite

**IDT100 Computer Aided Drafting I**
0.5 Credit  
Semester Course  9,10,11,12  
Computer Aided Drafting is an introductory course where students learn to create working drawings that are utilized in field of Drafting, Manufacturing, and Engineering.. Topics include Basic Technical Drawings, Dimensioning Standards, Architectural Blueprints, and Isometric Pictorial Drawings.  
Counts as an elective credit  
No Prerequisite

**IDT200 Computer Aided Drafting II (MCC: Auto Cad I)**
0.5 Credit  
Semester Course  9,10,11,12  
Students learn an advanced computer-based CAD system. Topics include multiview drawings, conceptual application, and 3d Modeling skills used throughout the manufacturing industry.  
Counts as an elective credit and MCC CAD 114  
Prerequisite: Computer Aided Drafting I  
Requires an MCC Admission Application and proficient assessment scores.

**IDT101 Manufacturing I (MCC: Lathe Work)**
0.5 Credit  
Semester Course  9,10,11,12  
Students experience manufacturing techniques used in industry. Topics include metal casting, forging, milling machines, lathe machines, cutting process, and drilling and tapping processes.  
Counts as an elective credit and MCC Manufacturing and Maintenance Academy  
No prerequisite  
Requires an MCC Admission Application and proficient assessment scores.

**IDT201 Manufacturing II (MCC: Vertical/Horizontal Mills)**
0.5 Credit  
Semester Course  9,10,11,12  
Students continue with the experience gained in Manufacturing I. More in-depth topics and projects include: casting, forging, milling machines, lathes machines, cutting process, and drilling and tapping processes. The CNC mill and lathe machines will be used with the use of Tool Path Verification Software.  
Counts as an elective credit and MCC Manufacturing and Maintenance Academy  
Prerequisite: Manufacturing I  
Requires an MCC Admission Application and proficient assessment scores.

**IDT102 Welding Technology I**
0.5 Credit  
Semester Course  9,10,11,12  
Welding I is an introductory course that provides the student with valuable experience in arc (SMAW) and gas (OAW) welding theory and practice. Flat position techniques and welding joinery will be emphasized.  
Counts as an elective credit  
No prerequisite
IDT202 Welding Technology II
0.5 Credit  Semester Course  9,10,11,12
Welding II is intended for the student who is interested welding as a possible vocation. The course will cover out of position welding using SMAW, Brazing, MIG, and TIG methods. A project may also be completed at the end of the course.
Counts as an elective credit
Prerequisite: Welding Technology I

IDT103 Advanced Welding Technology (MCC: Maintenance Welding)
1.0 Credit  Year Course  10,11,12
This course is an extension of welding II. Students will be exposed to application of welding terminology and design and develop projects and repair work that will develop skills toward future pursuits in welding careers.
Counts as an elective credit and MCC WEL 124 and WEL 949
Prerequisite: Welding II with a C or better
Requires an MCC Admission Application and proficient assessment scores.

IDT502 Car Care
0.5 Credit  Semester Course  9, 10,11,12
Students learn the basics of automotive maintenance. This is recommended for students who do not have a background in automotives. Topics include flat tires, oil changes, checking fluids, air cleaner, batteries, tune-ups, car maintenance and operations. Not open to students with previous auto classes.
Counts as an elective credit
Prerequisite: No Previous Auto Classes

IDT501 Power Mechanics
0.5 Credit  Semester Course  9,10,11,12
Students learn the operation of the internal combustion engine. Topics include two-stroke, four-stroke, diesel and rotary engine. Students will complete rebuilds of two types of four stroke engines, and perform basic diagnostics and repair.
Counts as an elective
No prerequisite

AGR502 Equipment Repair & Maintenance (MCC: Equipment Repair)
0.5 Credit  Semester Course  9,10,11,12
Formerly Machinery Maintenance and Operation. Students learn the operational procedures for a shop or agricultural environment. They will learn basic maintenance and operation of industry relevant equipment..
Counts as an elective
Prerequisite: Power Mechanics or Agriculture I
Requires an MCC Admission Application and proficient assessment scores.

IDT105 Wood Technology I
0.5 Credit  Semester Course  9,10,11,12
Students learn the basics of woodworking. Topics include safety, hand tools, portable electric tools and construction of simple projects.
Counts as an elective credit
No Prerequisite

IDT205 Wood Technology II
0.5 Credit  Semester Course  9,10,11,12
Students learn advanced skills in woodworking. Topics include designing, drawing and construction of projects with power woodworking machines.
Counts as an elective credit
Prerequisite: Wood Technology I
IDT111 Advanced Woods and Carpentry I
0.5 Credit Semester Course 10,11,12
Students learn how to design and build furniture. Woodworkers will learn the fundamentals of precise joints and their appropriate application in the construction and manufacturing industries. Power tools, machinery, and applied technologies will allow each student to create their own unique projects.
Counts as an elective credit
Prerequisite: Wood Technology II

IDT211 Advanced Woods and Carpentry II
0.5 Credit Semester Course 10,11,12
Students will expand their skillset and knowledge base learned in Advanced Woods and Carpentry I. Students will master the material processes and technologies used to produce a fine piece of furniture. A larger-scale industry relevant project will be completed individually and/or as a class.
Counts as an elective credit Prerequisite: Advanced Woods and Carpentry I

IDT104 Computer Integrated Manufacturing (Weighted grading Scale) (MCC: Computer Integrated Manufacturing)
1.0 Credit Year Course 10,11,12
Computer Integrated Manufacturing is the study of manufacturing planning, integration, and implementation of automation. ... CIM is one of the specialization courses in the Project Lead The Way high school engineering program.
Counts as elective credit and MCC MFG 201 and 221
Prerequisite: Principles of Engineering
Requires an MCC Admission Application and proficient assessment scores.

IDT107 Introduction to Engineering Design (*weighted grading scale) (MCC: Intro to Engineering Design)
1.0 Credit Year Course 9,10,11,12
This is the first in a series of courses initiated by Project Lead the Way (PLTW). Students will use a problem solving model to improve existing products and invent new ones. Using three dimensional modeling software, students communicate the details of the products. Emphasis is placed on the analyzing potential solutions and communicating ideas to others.
This is a dual credit/college course.
Counts as an elective credit and MCC EGT 400. Credit may be available through ISU and U of I.
Prerequisite: Must be taken after or concurrently with Algebra I
Requires an MCC Admission Application and proficient assessment scores.

1.0 Credit Year Course 10,11,12
Principles of Engineering is the Second of a four course program initiated by "Project Lead the Way." The curriculum uses project-based, hands-on experience to teach students the key elements and skills of engineering and technology-based careers by immersing them in real-world engineering problems.
Counts as an elective. and MCC EGT 410. Credit may be available through ISU and U of I.
May be taken with other math courses.
Prerequisite: C+ or higher in Introduction to Engineering and Design
Requires an MCC Admission Application and proficient assessment scores.

IDT109 Civil Engineering and Architecture (*weighted grading scale) (MCC: Civil Engineering & Architecture)
1.0 Credit Year Course 10,11,12
This course is an overview of civil engineering and architecture. CEA emphasizes the inter-relationship and mutual dependence of both fields.
Students use state of the art software to solve real world problems and apply knowledge to hands on activities. Topics covered will include: the roles of civil engineers and architects, project planning, site planning, building design and project documentation and presentation. This is a dual credit/college course.
Counts as an elective and MCC EGT 460. Credit may be available through ISU and U of I.
Prerequisite: C+ or higher in Introduction to Engineering and Design
Requires an MCC Admission Application and proficient assessment scores.
IDT113 Environmental Sustainability (*weighted grading scale) (MCC: Biotechnical Engineering)
1.0 Credit  Year Course  11,12
Formerly Biotechnical Engineering. This course is a Project Lead the Way survey course that introduces engineering students to the technology in life sciences. Topics covered include: safety and documentation, intro to forensics, prosthetic design, gene splicing, bio technical remediation of pollution, cardiovascular devices and imaging, and impact of new technologies.
Counts as an elective and MCC EGT440. Credit may be available through ISU and U of I.
Prerequisite: C+ or higher in Introduction to Engineering and Design
Requires an MCC Admission Application and proficient assessment scores.

IDT601 Industrial Tech Work-Based Learning
3.0 Credit  Year Course  12
See Mr. Kitzmann for an application and additional information. If accepted students will have the opportunity to participate in a paid internship with a local company or business related to their career choice. Requirements to be considered for this program are: senior status, 2.0 GPA overall, 2.5 GPA in related coursework, and successful completion of 6 industrial Technology courses. Attendance will also be considered. Internships are not guaranteed; every effort will be made to place students.
Counts as an elective credit
Prerequisite: Six Industrial Technology Classes
1. Must take at least four years (4 credits) of courses in the Industrial & Engineering Technology Education department.

2. Must take at least two of the MCC/EICC concurrent enrollment courses offered at MHS. Concurrent enrollment classes are taught at MHS. Students receive both high school and college credit simultaneously. See course guidebook-(Industrial & Engineering Technology). *Must receive an A in these two courses.

3. Have a general overall GPA of at least 3.0.

4. Have a GPA of 3.5 in the courses listed above.

5. Student will have good attendance and display employable skills in accordance to (21st Century Skills Standards) Iowa Core.

6. Must exhibit a Capstone experience.

The Capstone experience for each Scholar will be a project that exhibits a deep level of understanding of their area of interest. This Capstone will be the synthesis of the important content, skills, or knowledge that are of vital significance and importance in the Scholar’s area of focus. The capstone project must be related to one of the strands in the department: Advanced Welding, Advanced Manufacturing, Construction/Wood Tech, Engineering/Drafting Design, and Power Mechanics/Automotive.

- **Work Based Learning**: Seniors who (successfully) participate in a yearlong internship experience via the work based learning program will automatically fulfill the capstone experience. For scholar status they would just need to meet the first (1-5) criteria.

The individual Capstone proposal must be approved in advance in May of the junior year. A presentation of the Capstone experience will be adjudicated prior to May 15 of the senior year by a jury of three composed of their Capstone advisor, a 2nd teacher, and a MHS administrator.

The Capstone teacher/advisor will meet with their team of assigned scholars during the first resource period of each month. A topical agenda with timeline will guide the process. This will be explained to all participants during the September large group meeting.
Language Arts/ESL Classes

ENG100 English 9
1.0 Credit Year Course 9
Students learn all language arts skills. Topics include writing, grammar, vocabulary, library use, literature, listening, and speaking.
Counts as an English 9 credit
No Prerequisite

ENG101 Pre AP English 9 (*weighted grading scale)
1.0 Credit Year Course 9
Students learn an advanced level of language arts skills through a wide variety of formats. This course is recommended as preparation for AP classes and/or college level classes and will require substantial work time outside of class. Topics include writing, grammar, vocabulary, speaking, literature, and listening.
Counts as an English 9 credit
Prerequisite: Teacher Recommendation

ENG102 English 10
1.0 Credit Year Course 10
Students learn all language arts skills. Topics include reading, writing, listening, speaking, literature testing skills, grammar, and vocabulary.
Counts as an English 10 credit

ENG119 Pre AP English 10 (*weighted grading scale)
1.0 Credit Year Course 10
For students interested in preparing for AP Language and Composition or AP Literature and Composition, this course is offered in lieu of the 10th OR 11th grade English course. Students will explore both literary and rhetorical analysis through examination of fiction and nonfiction works. This course serves as a bridge between the Enriched offerings and the College Board approved AP courses, providing students with practice using the analytical thinking and the types of effective communication necessary for success in the AP courses. (Summer reading is required)
Counts as an English 10 credit
Prerequisite: Honors English 9 or Teacher Recommendation

ENG104 English 11
1.0 Credit Year Course 11
Students learn language arts skills through American literature. Texts for this course are poems, short stories, dramatic pieces, novels, journalism, movies, works of art, and many other forms of communication. Reading, writing, speaking, viewing, and listening are modes of communication that will shape student learning.
Counts as an English 11 credit

ENG107 AP English Language and Composition (*weighted grading scale)
1.0 Credit Year Course 11,12
Because they cover different skills, students are encouraged to take both AP English classes. Students learn college level reading, writing and speaking skills. Topics include rhetorical analysis, argumentative essays, globalization, electronic communication, critical reading, and vocabulary. Readings are primarily non-fiction, but also include some fiction, poetry, and drama. Summer reading is required.
Counts as English 11 or English 12
Prerequisite: Pre AP or Teacher Recommendation

ENG503 English 12/Composition
1.0 Credit Year Course 12
Students will deepen their knowledge of reading, formal writing, speaking, listening, and technological skills and understand why literacy is important and necessary to become a member of society in the 21st century and a participant in the global economy.
Counts as an English 12 credit
ENG108 AP English Literature and Composition (*weighted grading scale)
1.0 Credit  
Year Course  11,12
Because they cover different skills, students are encouraged to take both AP English classes. Students learn college level reading, writing and speaking skills. Topics include British and American authors, literary analysis, as well as expository, analytical, and argumentative essays. Readings are primarily fiction, poetry, and drama. Summer reading is required.
Counts as English 11 or English 12 credit  
Prerequisite: Pre AP, AP Lang, or Teacher Recommendation

ENG505 Mythology and Folklore
0.5 Credit  
Semester Course 11,12
Students learn background information about myths and folktales from around the world. Topics include Greek/Roman mythology, Norse mythology and Egyptian mythology with reading extensively both in and out of class, presenting orally independently and in groups, along with teaching a lesson to the class. Content will include college level reading with mature topics and themes.
Counts as an core elective credit  
No Prerequisite

ENG506 Women and Literature
0.5 Credit  
Semester Course 9,10,11,12
Both male and female students will experience learning from a multicultural perspective that incorporates group projects, current events, reading, writing, and a student-selected community service project. The focus of the course is critical thinking and discussion surrounding the pressures and influences of society and culture on both men and women. Students accomplish this through an examination of a variety of literature by women, about women, and reflecting women through literary history. This is a highly discussion-based course in which all students must actively participate. Content will include college level reading with mature topics and themes.
Counts as an core elective credit  
No Prerequisite

ENG507 Exploring Drama
0.5 Credit  
Semester Course 9,10,11,12
Students learn all areas of drama using individual, small group, and large group activities. Topics include reading plays, acting, stage movement, mime, vocalization, and play writing.
Counts as an core elective credit  
No Prerequisite

ENG510 Acting I
Students will perform a variety of scripts both original and by contemporary and classic playwrights for a variety of audiences. Scripts will include: monologues, children's theater, reader's theater, drama, and comedy.
0.5 Credit  
Semester Course 9,10,11,12
Counts as core elective credit  
No Prerequisite

ENG109 Journalism I
0.5 Credit  
Semester Course 9,10,11,12
Students will understand the history of journalism, the law and ethics associated with journalism, and key terms associated with journalistic writing. Students will understand different article types and the style in which to write those articles. Students will know how to conduct an interview and structure questions. Concepts of design and photography will also be taught.
Counts as an core elective credit  
No Prerequisite
ENG209 Journalism II
1.0 Credit Year Course 9,10,11,12
This course further explores the concepts taught in Journalism I. This class will offer more extensive training in journalistic writing and interviewing skills, including sports writing, editorials, and news writing. This course will also focus on concise writing and focus on grammar skills necessary to publish journalistic pieces. Students will learn how to use YearTech online publishing for the yearbook.
Counts as core elective credit
Prerequisite: Journalism I

ENG511 Writer’s Workshop
0.5 Credit Semester Course 9,10,11,12 (recommended 11,12)
Students learn a variety of creative writing forms. Topics include short fiction, non-fiction, poetry, and journaling.
Counts as an core elective credit
No Prerequisite

ESL501 English Language Development A
1.0 Credit Year Course 9,10,11,12
This class focuses on developing English Language Learners’ skills in reading, writing, listening, and speaking. This class uses Language curriculum books at levels A & B. The purpose of the class is to increase overall English language proficiency. The class provides skills and practice with understanding and using English in the context of general education high school classes, post-secondary education, the workplace environment, and other real-world situations. It can be taken multiple times to continue developing students’ English language proficiency.
Counts as core elective credit

ESL502 English Language Development C
1.0 Credit Year Course 9,10,11,12
This class focuses on developing English Language Learners’ skills in reading, writing, listening, and speaking. This class uses Language curriculum books at levels C & D. The purpose of the class is to increase overall English language proficiency. The class provides skills and practice with understanding and using English in the context of general education high school classes, post-secondary education, the workplace environment, and other real-world situations. It can be taken multiple times to continue developing students’ English language proficiency.
Counts as core elective credit

ESL503 English Language Development E
1.0 Credit Year Course 9,10,11,12
This class focuses on developing English Language Learners’ skills in reading, writing, listening, and speaking. This class uses Language curriculum books at levels E & F. The purpose of the class is to increase overall English language proficiency. The class provides skills and practice with understanding and using English in the context of general education high school classes, post-secondary education, the workplace environment, and other real-world situations. It can be taken multiple times to continue developing students’ English language proficiency.
Counts as core elective credit

ENG121 AP Seminar (*weighted grading scale)
1.0 Credit Year Course 10, 11,12
This is a foundational course that engages students in cross curricular conversations that explore the complexities of academic and real world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, listening to and viewing speeches, and experiencing artistic works. Students learn to synthesize information from multiple sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence based arguments.
Counts as elective credit
Prerequisite: Honors English 9, Pre AP, AP Lang, or Teacher Recommendation
ENG122  AP Research (*weighted grading scale)  
1.0 Credit  
Year Course  11,12  
AP Research allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a year-long research based investigation to address a research question. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. Students explore their skill development, document their processes, and curate the artifacts of the development of their scholarly work in a portfolio. The course culminates in an academic paper of approximately 4000–5000 words (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense.  
Counts as an elective credit.  
Prerequisite: AP Seminar  

ENG123  College Prep English  
1.0 Credit  
Year Course  12  
Basic writing skills course designed to help the student who has difficulty in expressing thoughts clearly and effectively in written communication. Emphasis is on improving writing skills by constant practice. Grammar, sentence structures, and paragraph structures are studied in the context of writing. This course is required of students whose historical grades in high school English classes or assessment scores indicate a need for preparatory work in English composition.  
Counts as an English credit
Requirements for the Scholars Track:
  ● Complete at least 3 credits in advanced, year-long courses:

  Honors English 9  
  Pre-AP  
  AP Language and Composition  
  AP Literature and Composition  
  AP Seminar  
  AP Research
      ● Complete at least 1½ credits (3 semester-long classes) in Language Arts elective courses:

  World Literature  
  Mythology and Folklore  
  Women and Literature  
  Exploring Drama  
  Acting I  
  Journalism I  
  Journalism II  
  Writer’s Workshop
      ● Complete a Capstone Project

The Capstone experience for each Scholar will be a project that exhibits a deep level of understanding of their area of interest. This Capstone will be the synthesis of the important content, skills, or knowledge that are of vital significance and importance in the Scholar’s area of focus. The Capstone will be evaluated through the lenses of three standards: a) Construction of Knowledge, b) Elaborate Written Communication, and c) Connections to the Student’s Life. Students will develop a Capstone proposal based on the following criteria.

**Standard 1: Construction of Knowledge**
The task asks students to interpret, analyze, synthesize or evaluate information in writing about a topic, rather than merely reproducing the information. To score high, the task should require interpretation, analysis, synthesis, or evaluation of information that goes deeper than simple familiarity with the information.

**Standard 2: Elaborated Written Communication**
The task asks students to draw conclusions, make generalizations or arguments and support them through extended writing. Explicitly call for generalization AND support. The task asks students, using narrative or expository writing, to draw conclusions, make generalizations or arguments, AND to substantiate them with examples, summaries, illustrations, details or reasons.
Mathematics Classes

MAT100 Algebra I
1.0 Credit Year Course 9,10,11,12
Students learn beginning level Algebra skills. Topics include simplifying expressions, solving equations and inequalities, number line graphing, linear graphing, systems of equations, exponents, exponential growth and decay, rational expressions, polynomials and functions.
Counts as a Mathematics Credit
No Prerequisite

MAT104 Geometry
1.0 Credit Year Course 9,10,11,12
Students learn basic geometry skills. Topics include points, lines, angles, right triangles, proofs and trigonometry.
Counts as a Mathematics credit
Prerequisite: Algebra I

MAT114 Pre AP Geometry (*weighted grading scale)
1.0 Credit Year Course 9,10
Students learn an advanced level of Geometry. Topics include points, lines angles, right triangles, trigonometry, explorations with graphing calculators, in-depth proofs, circles and quadrilaterals.
Counts as a Mathematics credit.
Prerequisite: Pre AP Algebra I

MAT102 Algebra II
1.0 Credit Year Course 11,12
Students learn advanced Algebra topics. Topics include number systems, systems of equations, radicals, imaginary numbers, rational and polynomial expressions and conic sections
Counts as a Mathematics credit
Prerequisite: Geometry

MAT115 Pre AP Algebra II (*weighted grading scale)
1.0 Credit Year Course 10, 11,12
Students learn advanced algebra skills with more in-depth work done with each topic. Topics include systems of equations, conic sections, polynomial and rational expressions and radicals.
Counts as a Mathematics Credit
Prerequisite: Pre AP Geometry

MAT106 Pre-Calculus
1.0 Credit Year Course 11,12
Students will learn advanced math topics. Topics include polynomial, exponential, logarithmic and trigonometric functions, graphs, systems of equations, matrices and probability.
Counts as a Mathematics Credit
Prerequisite: Algebra II

MAT116 Pre AP Pre Calculus (*weighted grading scale)
1.0 Credit Year Course 11,12
Students learn an advanced level of Pre Calculus skills. Topics include functions, logarithms, trigonometry, matrices, conic sections, polar coordinates and limits.
Counts as a Mathematics or core elective credit
Prerequisite: Pre AP Algebra II
MAT111 AP Calculus (*weighted grading scale)
1.0 Credit Year Course 12
Students learn mathematics skills as designated in the national AP curriculum. Topics include algebraic, trigonometric, exponential and logarithmic functions, differential and integral calculus.
Counts as a mathematics/ or core elective credit
Prerequisite: Pre AP Pre-Calculus

MAT110 Probability and Statistics
1.0 Credit Year Course 10,11,12
Probability and Statistics is an exploratory course into the topic of statistics. Students will explore data with variables and distributions, and relationships of data. They will produce data for sampling and conducting basic experiments. Students will then have an introduction to probability and sampling distributions and an introduction to inference.
Counts as a Mathematics elective credit
Prerequisite: Algebra II

MAT117 AP Statistics (*weighted grading scale)
1.0 Credit Year Course 11,12
Students learn about the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Develop analytical and critical thinking skills as you learn to describe data patterns and departures from patterns, plan and conduct studies, use probability and simulation to explore random phenomena, estimate population parameters, test hypotheses, and make statistical inferences.
Counts as Mathematics or core elective credit
Prerequisite: Algebra II and Geometry

MAT118 College Prep Math
1.0 Credit Year Course 12
This course is designed for seniors who will be non-math majors in college. The goal of the course is to prepare students for success in non-remedial, post-secondary math classes. The topics in the course include numeracy, proportional reasoning, algebraic reasoning, functions, geometry, statistics, and student success strategies. When completed, the successful student will develop mathematical maturity through problem solving, critical thinking and writing. This course is computer enhanced.
Counts as a Mathematics credit
Prerequisite: Algebra II

MAT501 AP Computer Science Principles (*weighted grading scale)
1.0 Credit Year Course 10,11,12
This course offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. AP Computer Science Principles will give students the opportunity to use technology to address real-world problems and build relevant solutions. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science.
Counts as elective credit
Prerequisite: Geometry
Scholar Designation in Mathematics Requirements

The Scholar Designation enables students who demonstrate dedication and high achievement in a specific curricular area to be recognized at graduation. Students must complete the following to earn this designation.

1. Must complete at least four years of mathematics in grades 9-12 at Muscatine High School.

2. Students must complete the two following courses: AP Statistics and AP Calculus.

3. Have an overall GPA of 3.5 or higher.

4. Have a GPA of 4.0 or higher in all mathematics courses.

5. Must take the AP exams in both AP Statistics and AP Calculus.

6. Must exhibit a “Capstone” experience.

Capstone Experience

The student-designed capstone experience is the student’s opportunity to demonstrate extraordinary commitment and understanding of the curricular area. It will be a synthesis of the important content, skills, and knowledge that are of significance in the student’s area of focus. The capstone will be evaluated by how the student demonstrates constructions of new knowledge, how the student uses elaborate communication techniques to explain the project and how the project connects to the student’s life.

The individual capstone proposal must be approved in advance in May of the junior year. Capstone experiences may include research, an internship, etc. A jury of three (the capstone advisor, a Muscatine High School administrator and an instructional coach) will arbitrate a presentation of the capstone experience prior to May 15 of the senior year.
Music Classes

MUS100 Varsity Band
1.0 Credit Year Course 9, 10,11,12
Students in this class will participate in The Muskie Varsity Marching Band as well as concert band during 1st semester. Students will learn an understanding of music and improve playing ability. Topics include lessons, marching, concert, jazz and pep band, festivals and competitions, concerts and solo and ensemble performances. Freshman may take this course with the permission of middle or high school instructors and an understanding that marching is a required part of this class. Auditions will be held for the more advanced concert group at the end of the semester. Contact Mr. Heid at jeff.heid@mcsdonline.org for further information.
Counts as an elective credit
Prerequisite MUS200 or consent of an MHS Band Director

MUS200 Concert Band
1.0 Credit Year Course 9,10,11,12
This course is a non-marching band class. Students who participate in this class will have concert band starting the first day of school. They will perform two concerts during the first semester, and two concerts during second semester. This class includes private lessons, concert band, jazz band, pep bands during basketball season, two concerts each semester, solo and ensemble in the spring. Contact Mr. Heid at jeff.heid@mcsdonline.org for further information.
Counts as an elective credit
No Prerequisite

MUS106 Freshman Orchestra
1.0 Credit Year Course 9
String ensemble focused on developing musical skills necessary to succeed in upper class orchestras. Topics include rehearsals, lessons, performance skills, and concerts. Required performances include but are not limited to the four school concerts.
Counts as an elective credit
No Prerequisite

MUS109 Philharmonic Orchestra
1.0 Credit Year Course 10,11,12
String ensemble focused on increasing fundamental skills, through meaningful literature and skill building exercises. Topics include rehearsals, lessons, performance skills, and concerts. Required performances include but are not limited to the four school concerts and the IHSMA Large Group Festival.
Counts as an elective credit
Prerequisite: Audition and instructor approval

MUS108 Chamber Orchestra
1.0 Credit Year Course 10,11,12
String ensemble focused on extended skills, necessary to be prepared for college level literature. Literature will push students to the level necessary to successfully transition into college ensembles. Topics include rehearsals, lessons, performance skills, and concerts. Required performances include but are not limited to the four school concerts and the IHSMA Large Group Festival.
Counts as an elective credit
Prerequisite: Audition and instructor approval

MUS501 Color Guard
0.5 Credit Semester Course 9,10,11,12
Students learn musical expression through movement. Topics include marching techniques, dance techniques and equipment use. The work for the semester begins during summer rehearsals. This co-curricular class meets before school at 7:00 am, and include evening, and weekend commitments.
Counts as an elective credit
No Prerequisite
MUS102 Freshman Choir
1.0 Credit  Year Course  9
Students learn basic audience/performance skills. Topics include breath support, vocal production and projection, diction, musicianship and basic music theory and history. Required performances include but are not limited to the four school concerts. Additional performances or outside school rehearsals may be scheduled with sufficient advance notice. Members of this ensemble may audition for other choir ensembles.
Counts as an elective credit
No Prerequisite

MUS103 A Cappella Choir
1.0 Credit  Year Course  10,11,12
Membership is based on auditions held the previous spring. Students learn intermediate and advanced performance skills. Topics include breath support, vocal production, diction, music theory, and musicianship. Required performances include but are not limited to the four school concerts, the IHSMA Large Group Festival, and the MHS Commencement Exercises. Additional performances or outside school rehearsals may be scheduled with sufficient advance notice. Members of this ensemble may audition for other choir ensembles.
Counts as an elective Credit
Prerequisite: Audition and approval of Director

MUS104 Concert Choir
1.0 Credit  Year Course  10,11,12
This ensemble is comprised of students in grades 10-12. Students learn intermediate performance skills. Topics include breath support, vocal production, diction, music theory, and musicianship. Required performances include but are not limited to the four school concerts and the IHSMA Large Group Festival. Additional performances or outside school rehearsals may be scheduled with sufficient advance notice. Students in this ensemble may audition for extra curricular choir groups. Students are also encouraged to participate in the IHSMA Solo/Ensemble Festival. Concert Choir meets for one period daily.
Counts as an elective Credit
Prerequisite: Audition and approval of Director

MUS105 Treble Choir
1.0 Credit  Year Course  10,11,12
Membership is based on auditions. Students learn intermediate and advanced performance skills. Topics include vocal technique, music theory, music history and musicianship. Required performances include but are not limited to four school concerts and IHSMA Large Group Festival. Other performances or outside school rehearsals may be scheduled with sufficient notice. Members of this ensemble may audition for other choral ensembles.
Counts as an elective credit
Prerequisite: Audition and approval of Director

MUS107 AP Music Theory (*weighted grading scale)
1.0 Credit  Year Course  11,12
See www.collegeboard.com for a full description of this course.
Counts as an Elective credit
Prerequisite: Participation in an MUS100 course. Consent of instructor if not a member of a high school music course. All students will take a pretest of musical concepts on the first day of class. Contact the instructors for summer preparatory work.

MUS110 Percussion Ensemble
1.0 Credit  Year Course  10,11,12
Students in this class will participate in the percussion ensemble as a replacement for Varsity or Concert Band. Participation in the Mighty Muskie Marching Band is required. Topics include percussion ensembles, solos, jazz and pep band, festivals, and competitions. Admittance into this course is based on an audition and/or a recommendation from a high school band director.
Contact Mr. Plummer at lee.plummer@mcsdonline.org for further information.
Prerequisite: Audition and instructor approval. Student must also participate in marching band.
Counts as an elective credit
Physical Education Classes

PHY501 Freshman PE & Health
0.5 Credit       Semester Course     9
This is a core curriculum required for all 9th grade students. Students will participate in a variety of activities including swimming, team sports, and individual sports, as well as CPR, and Health Education.
Counts as a Physical Education credit

PHY502 Competitive Team Games and Recreational Activities
0.5 Credit       Semester Course     10,11,12
Students will be participating in a variety of recreational activities, fitness activities, individual sports, and team sports. Focus will be on game strategy and competitive intramural format. Students must be prepared for some outdoor activity during late fall, winter, and early spring seasons.
Counts as a Physical Education credit

PHY528 Fundamentals of Team Games and Recreational Activities
0.5 Credit       Semester Course     10, 11, 12
Students will be participating in a variety of recreational activities, fitness activities, individual sports, and team sports. Skill development will be the primary emphasis, such as throwing, catching, striking, shooting, etc. which are related to the unit activity. During game play the focus will still be placed on skills, and learning to play by the correct rules and strategies of the games.
Counts as a Physical Education credit

PHY504 Cardiorespiratory Fitness
0.5 Credit       Semester Course     10,11,12
Students will participate in a variety of fitness activities such as aerobics (kickboxing, step, Zumba, etc), cross training, yoga, and pilates. Students will also participate in walking and jogging, as well as biking units.
Counts as a Physical Education credit

PHY505 Fitness Walking
0.5 Credit       Semester Course     10,11,12
Students will be required to walk approximately 2.5 miles each class period. Students do not need to dress out for class, but coats and hats are encouraged. Students will walk outside everyday that the wind chill is above 20 degrees.
Counts as a Physical Education credit

PHY523 Intro to Strength Training
0.5 Credit       Semester Course     9,10
Students must take this class before any other strength class. This class is designed to help prepare the student athlete for Advanced Strength Training Classes. During the course students will become familiar with weight room and swimming pool expectations and training techniques. Students will progress from body weight movements to exercises performed with weight. This class can fulfill the 9th grade Physical Education Requirement.
Counts as a Physical Education credit
PHY506 Strength Training Performance PE
0.5 Credit Semester Course 10,11,12
During the course students will use weight training techniques and cardio respiratory endurance activities to develop strength and overall fitness. Proper form and safety will be taught and emphasized. This course is designed for any student interested in strength training.
Counts as a Physical Education credit
Prerequisite: Intro to Strength Training

Advanced Strength Training PE
PHY524 1st Semester
PHY526 EARLY BIRD 1st Semester
PHY525 2nd Semester
PHY527 EARLY BIRD 2nd Semester
0.5 Credit Semester Course 10,11,12
This class is designed for the student athlete who will be competing in a Muscatine High School sport, sanctioned by the Iowa Athletic Associations. During the course students will use weight training techniques and cardio respiratory endurance activities to develop strength and increase their athletic performance. Proper form and safety will be taught and emphasized. 85% participation in the Summer Strength Training Program required.
Counts as a Physical Education credit or elective credit
Prerequisite: Intro to Strength Training and successful completion of skills tests.

PHY508 Personal Fitness
0.5 Credit Semester Course 10,11,12
Students will develop and execute their own personal fitness program that is supervised by the Physical Education teacher. Students will be required to workout in their Target Heart Rate Zone. This will be monitored by having the student wear a heart rate sensor. The options at MHS facilities include utilizing the new cardio equipment (ellipticals, bikes, treadmill, rowing machines, etc.), track, or other teacher-approved activities.
Counts as a Physical Education credit or elective credit
Project Lead the Way (PLTW)

IDT107 Introduction to Engineering Design (*weighted grading scale)  (MCC: Introduction to Engineering Design)
1.0 Credit  Year Course 9,10,11,12
This is the first in a series of courses initiated by Project Lead the Way (PLTW). Students will use a problem solving model to improve existing products and invent new ones. Using three dimensional modeling software, students communicate the details of the products. Emphasis is placed on the analyzing potential solutions and communicating ideas to others.
This is a dual credit/college course.
Counts as an elective credit and MCC EGT 400. Credit may be available through ISU and U of I.
Prerequisite: Must be taken after or concurrently with Algebra I
Requires an MCC Admission Application and proficient assessment scores.

1.0 Credit  Year Course 10,11,12
Principles of Engineering is the Second of a four course program initiated by "Project Lead the Way." The curriculum uses project-based, hands-on experience to teach students the key elements and skills of engineering and technology-based careers by immersing them in real-world engineering problems.
Counts as an elective. and MCC EGT 410. Credit may be available through ISU and U of I.
May be taken with other math courses.
Prerequisite: Introduction to Engineering
Requires an MCC Admission Application and proficient assessment scores.

IDT109 Civil Engineering and Architecture (*weighted grading scale) (MCC: Civil Engineering and Architecture)
1.0 Credit  Semester Course 11,12
This course is an overview of civil engineering and architecture. CEA emphasizes the inter-relationship and mutual dependence of both fields. Students use state of the art software to solve real world problems and apply knowledge to hands on activities. Topics covered will include: the roles of civil engineers and architects, project planning, site planning, building design and project documentation and presentation. This is a dual credit/college course.
Counts as an elective. and MCC EGT 460. Credit may be available through ISU and U of I.
Prerequisite: C or better in Intro to Engineering and Design
Requires an MCC Admission Application and proficient assessment scores.

IDT112 Engineering Design and Development (*weighted grading scale) (MCC: Engineering Design & Development)
1.0 Credit  Year Course 11,12
This course is designed to be a senior capstone project course. Each student will work through the design process with the intent to develop a patent. The topic is student driven. Design for manufacturability, prototyping, product testing, intellectual property, and manufacturing enterprise are all major topics covered. Students will use industry relevant software to design and complete all projects.
Counts as an elective and MCC EGT470. Credit may be available through ISU and U of I.
Prerequisite: C or better in Intro to Engineering and Design and Principles of Engineering.
Requires an MCC Admission Application and proficient assessment scores.

IDT113 Environmental Sustainability (*weighted grading scale) (MCC: Biotechnical Engineering)
1.0 Credit  Year Course 11,12
This course is a Project Lead the Way survey course that introduces engineering students to the technology in life sciences. Topics covered include: safety and documentation, intro to forensics, prosthetic design, gene splicing, bio technical remediation of pollution, cardiovascular devices and imaging, and impact of new technologies.
Counts as an elective and MCC EGT440. Credit may be available through ISU and U of I.
Prerequisite: C or better in Intro to Engineering Design
Requires an MCC Admission Application and proficient assessment scores.
## Science Classes

### SCI102 Biology
- **1.00 Credit**
- **Year Course**: 9,10
- **Prerequisite**: Completion of Biology & Chemistry with a B or better or Teacher Recommendation
- **Counts as**: Biological Science or Core Elective Credit

Students learn about living things. Topics include cellular respiration, photosynthesis, structure and function of living systems, genetics, evolution and ecology.

### SCI126 AP Prep Biology
- **1.00 Credit**
- **Year Course**: 9,10
- **Prerequisite**: Algebra I
- **Counts as**: Biological Science Credit

This course is recommended for those who have a particular interest in Biology and the natural sciences, and are interested in preparing for AP Biology and other advanced science courses. The course is designed to guide students in the investigation of all aspects of living organisms by examining real world problems through inquiry and critical thinking. Laboratory investigations play a prominent role in the Pre-AP course. Students are expected to independently design and carry out experiments using appropriate methods and resources. Pre-AP is a fast paced course and students will be ultimately responsible for their learning; extensive studies will include the following themes: Science as a Process, Evolution, Energy Transfer, Continuity and Change, Relationship of Structure to Function, Regulation, Interdependence in Nature, and Science/Technology in Society. Summer reading is required.

### SCI113 AP Biology (*weighted grading scale)
- **1.00 Credit**
- **Year Course**: 10,11,12

AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes — energy and communication, genetics, information transfer, ecology, and interactions. Summer lab research is required.

### SCI104 Chemistry
- **1.00 Credit**
- **Year Course**: 10,11,12
- **Prerequisite**: Teacher Recommendation

Students learn laboratory, inquiry and problem solving. Topics include energy, elements, compounds, formulas and chemical reactions. Safety goggles are required.

### SCI127 AP Prep Chemistry
- **1.00 Credit**
- **Year Course**: 10,11,12

This is an advanced course recommended for students with a strong interest in science and having excellent study skills. Many of the concepts are similar to those in Chemistry; presentation of material is accelerated and more detailed to prepare students for the rigor of college-level coursework. Additional topics, such as thermochemistry, electrochemistry, oxidation-reduction chemistry, kinetics, and equilibrium problem solving, etc. are covered for enrichment and preparation for AP and college level science courses. Special emphasis will be placed on hands-on activities and laboratory experiences; and on introducing skills concepts and assessment methods to prepare students for success in AP and other challenging courses. A scientific calculator is required.

### SCI121 AP Chemistry (*weighted grading scale)
- **1.00 Credit**
- **Year Course**: 10,11,12
- **Prerequisite**: Teacher Recommendation

The key concepts and related content that define the revised AP Chemistry course and exam are organized around a few underlying principles called the big ideas, which encompass the core scientific principles, theories, and processes governing chemical systems. For each of the big ideas, enduring understandings, which incorporate the core concepts that students should retain from the learning experience, are also identified.

**Counts as a Chemistry or Core Elective Credit**
SCI107 Physics  
1.00 Credit  
Year Course  
11,12  
Students will develop critical thinking and problem solving skills through exploring physical systems. In examining physical systems, students will develop reliable ways of thinking via modeling that allows them to interpret physical systems. Students will be expected to represent their thinking through graphs, maps, diagrams, mathematical relationships and verbal interpretations. Through consistent interpretation and reliable evaluation techniques, students can develop a deep conceptual understanding of the concepts: motion, forces, and energy.  
Counts as a Physics or core elective credit  
Prerequisite: Geometry, or concurrent with Geometry  

SCI128 Physics 2  
1.00 Credit  
Year Course  
12  
Students will develop critical thinking and problem solving skills through exploring physical systems. In examining physical systems, students will develop reliable ways of thinking via modeling that allows them to interpret physical systems. Students will be expected to represent their thinking through graphs, maps, diagrams, mathematical relationships and verbal interpretations. Through consistent interpretation and reliable evaluation techniques, students can develop a deep conceptual understanding of the concepts: thermodynamics, electricity and magnetism, vibrations and waves, and modern physics.  
Counts as a Physics or core elective credit  
Prerequisite: Physics and Teacher Recommendation. Should have taken or be enrolled in Pre Calculus.  

SCI122 AP Physics 1 (*weighted grading scale)  
1.0 Credit  
Year Course  
11,12  
This course is the equivalent to a first semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; mechanical waves and sound. It will also introduce electric circuits. Students will develop and use physics knowledge through the practice of inquiry. Twenty to twenty-five percent of the instructional time will be devoted to laboratory investigations. Students will engage in analyzing, making conjectures and arguments, solving problems in a collaborative setting through experimentation.  
Counts as a Physics or Core Elective Credit  
Prerequisite: Teacher Recommendation  

SCI123 AP Physics 2 (*weighted grading scale)  
1.0 Credit  
Year Course  
11,12  
See [www.collegeboard.com](http://www.collegeboard.com) for a full description of this course.  
Counts as a Physics or Core Elective Credit  
Prerequisite: Teacher Recommendation  

SCI500 Environmental Science  
1.0 Credit  
Year Course  
10,11,12  
This course will actively engage students in real world situations that are going to affect their futures. They will learn about population growth and how it affects the future of our planet. Topics include: pollution and effects on climate change, population growth, and proactive measures to lessen these effects.  
Counts as a Science/Core Elective Credit  
Prerequisite: B- or better in Biology and Chemistry  

SCI120 AP Environmental Science (*weighted grading scale)  
1.0 Credit  
Year Course  
10,11,12  
See [www.collegeboard.com](http://www.collegeboard.com) for a full description of this course.  
Counts as a Science/Core Elective Credit  
Prerequisite: B or better in AP Prep Biology or AP Prep Chemistry or an A in Biology or Chemistry
SCI501 Health  
1.00 Credit  
Topics covered will include current health issues such as nutrition and diet, prescription drug use, environmental health, substance abuse, mental health, medical issues, diseases, hygiene, and reproductive and other body systems.  
Counts as a Science/Core Elective Credit  
Prerequisite: Biology

SCI118 Earth Science  
1.0 Credit  
Students learn via lecture, lab and homework. Topics include plate tectonics, earthquakes, volcanoes, rocks and minerals, oceanography, astronomy, and weather.  
Counts as a Science/Core elective credit  
No Prerequisite

SCI115 Human Anatomy and Physiology  
1.0 Credit  
Students learn the structure and function of anatomical systems of the human body. Topics include skeletal, nervous integumentary, muscular and endocrine systems, circulatory, respiratory, digestive, reproductive and excretory systems..  
Counts as a Science/Core elective credit  
Prerequisite: Biology
1. Must take at least six years (6 credits) of courses in the Science Department.
   ● Must take 6 of the following the following classes – Honors Biology, Honors Chemistry, AP Biology, AP Chemistry, AP Physics, AP Environmental Science or Anatomy. It would be possible to substitute AP Biology for AP Prep Biology and AP Chemistry for AP Prep Chemistry.
2. Have a general overall GPA of at least 3.0.
3. Have a GPA of 3.5 in the courses listed above.
4. Student will have good attendance and display an interest in Science and Science related topics.
5. Must develop a Capstone project.

The Capstone experience for each Scholar will be a project that exhibits a deep level of understanding of their area of interest. This Capstone will be the synthesis of the important content, skills, or knowledge that are of vital significance and importance in the Scholar’s area of focus. The capstone project must be related to one of the strands in the department: Biology, Chemistry, and Physics. For example, Biology could include medical topics. The individual Capstone proposal must be approved in advance in May of the junior year. A presentation of the Capstone experience will be adjudicated prior to May 15 of the senior year by a jury of three composed of their Capstone advisor, a 2nd teacher, and a MHS administrator. The Capstone teacher/advisor will meet with their team of assigned scholars during the first resource period of each month. A topical agenda with timeline will guide the process. This will be explained to all participants during the September large group meeting.
Social Studies Classes

SOC107 World Cultures
1.0 Credit Year Course 9
This is the only social studies elective course designated for freshman. The objective of this course is to prepare students for upper level high school courses with an emphasis on improving critical thinking skills through a cross-curricular approach. Topics first semester will look at the history of the universe to the rise of human civilizations. Second semester will cover how civilizations have varied and progressed over time. During both semesters various topics will be examined through many different disciplines such as geography, history, anthropology, biology, physics and astronomy. Reading and writing skills will be emphasized.
Counts as a Social Studies/Core Elective requirement
No Prerequisite

SOC100 United States History
1.0 Credit Year Course 11
Students learn US history from 1877 to the present. Topics include The Rise of Business and Industry, World War I, The 1920’s, The Great Depression, World War II, Cold War, Civil Rights, and Post-Cold War Era.
Counts as a US History requirement
No Prerequisite

SOC101 AP United States History (*weighted grading scale)
1.0 Credit Year Course 11,12
This course is designed to be the equivalent of a two-semester introductory college or university U.S. history course. Students investigate significant events, individuals, developments, and processes in nine historical periods from approximately 1491 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical comparisons; and utilizing reasoning about contextualization, causation, and continuity and change over time. The course explores seven themes: American and national identity; migration and settlement; politics and power; work, exchange, and technology; America in the world; geography and the environment; and culture and society. Students should be able to read a college-level textbook and produce college-level writing. This course will require adequate time to invest in additional study.
Counts as a US History requirement
Prerequisite: Success in other AP and/or social studies courses

SOC502 Modern US History
0.5 Credit Semester Course 10,11,12
Students learn US history from after World War II to the present. Topics include historical and cultural events of this 50 year period in the United States.
Counts as a social studies/core elective
No Prerequisite

SOC505 Sociology
0.5 Credit Semester Course 10,11,12
Students learn about group human behavior and how it affects others. Topics include culture, society, social control and personality development.
Counts as a social studies/core elective
No Prerequisite

SOC503 International Relations
0.5 Credit Semester Course 10,11,12
Students learn how nations interact with each other on critical issues. Topics involve a study of world affairs to combine social, economic, psychological and historical principles.
Counts as a social studies/core elective
No Prerequisite
SOC504 Psychology
0.5 Credit  Semester Course  10,11,12
Students learn about individual human behavior and how it affects others. Topics include personality development, abnormal behavior, dating and marriage relationships, aggression, stress, death and abuse.
Counts as a social studies/core elective
No Prerequisite

SOC500 World Geography
0.5 Credit  Semester Course  10,11,12
Students learn physical and human geography. Topics include climates, soil, rivers and cultures of the world.
Counts as a social studies elective/core elective
No Prerequisite

SOC110 AP World History (*weighted grading scale)
1.0 Credit  Year Course  10,11,12
This course is designed to be the equivalent of a two-semester introductory college or university world history course. Students investigate significant events, individuals, developments, and processes in six historical periods from approximately 8000 B.C.E. to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical comparisons; and utilizing reasoning about contextualization, causation, and continuity and change over time. The course explores five themes: interaction between humans and the environment; development and interaction of cultures; state building, expansion, and conflict; creation, expansion, and interaction of economic systems; and development and transformation of social structures.
Students should be able to read a college-level textbook and produce college-level writing. This course will require adequate time to invest in additional study.
Counts as a social studies/core elective
Prerequisite: Success in other AP and/or social studies courses

SOC104 US Government
0.5 Credit  Semester Course  11,12
Students learn all levels of national, state and local government. Topics include the constitution, branches of government, political parties and the mechanisms of democracy.
Counts as a US Government requirement
No Prerequisite

SOC103 AP US Government and Politics (*weighted grading scale)
1.0 Credit  Year Course  11,12
This is a college-level introduction to key political concepts, ideas, institutions, policies, interactions, roles, and behaviors that characterize the constitutional system and political culture of the United States. Students will read and analyze U.S. foundational documents, Supreme Court decisions, and other texts and visuals to gain an understanding of the relationships and interactions between political institutions and behavior. They will read and interpret data, develop evidence-based arguments, and engage in an applied civics or politics research-based project.
Students should be able to read a college-level textbook and produce college-level writing. This course will require adequate time to invest in additional study.
Counts as a US Government requirement and a social studies elective
Prerequisite: Success in other social studies classes

SOC108 AP Human Geography (*weighted grading scale)
1.0 Credit  Year Course  9,10,11,12
This class is designed as an entry level AP course. It will help students develop and master geographic thinking skills, asking “where” and “why” questions about patterns we can visually map on Earth’s surface. The distribution of people and resources have important implications in the world today, and students will leave this class with a better understanding of the role geography plays in global issues. Topics of study include: population and migration; cultural patterns and processes; political geography; agricultural and rural land use; industrialization and economic development; and urban geography.
Counts as a social studies/core elective
Prerequisite: Teacher Recommendation
SOC109 AP Psychology (*weighted grading scale)
1.0 Credit  Year Course  10,11,12
This course explores the concepts, theories, perspectives, phenomena, and behaviors associated with the subfields and research strategies in psychology. The course will also utilize important research that has contributed to the scientific field while looking at the methods used to study various aspects of behavior. Students with strong reading skills and time management are highly successful. The course will prepare students to sit for the College Board AP Psychology Exam.
Counts as a social studies/core elective
No Prerequisite
1. Must take at least four years (4 credits) of social studies in grades 9-12 at Muscatine High School.

2. Must complete any 4 AP courses offered within the department. Scholars may choose from AP Geography, AP US History, AP World History, AP Psychology, and AP Government.

3. Have an overall GPA of at least 3.0

4. Have a GPA of at least 3.5 in all social studies courses.

5. Must take all AP exams.

6. Must exhibit a “Capstone Experience”.

   The student designed capstone experience is the student’s opportunity to demonstrate extraordinary commitment and understanding of the curricular area. It will be a synthesis of the important content, skills, and knowledge that are of significance in the student’s area of focus. The capstone will be evaluated by how the student demonstrates constructions of new knowledge, how the student uses elaborate communication techniques to explain the project, and how the project connects to the student’s life.

   The individual capstone proposal must be approved in advance in May of the junior year. Capstone experience may include research, an internship, etc. A jury of three (the capstone advisor, an MHS administrator, and an instructional coach) will arbitrate a presentation of the experience prior to May 15 of the senior year.
World Languages
The goal of Muscatine Community School District’s World Language department is to develop critical thinkers who are able to communicate effectively in the respective world languages as global-minded citizens. All languages follow the American Council on Teaching Foreign Language (ACTFL) Standards, which focus on using language meaningfully through Interpersonal Spoken and Written Communication, Interpretive Reading and Listening Communication, and Presentational Spoken and Written Communication.

WOR100 Chinese I
1.0 Credit Year Course 9,10,11,12
Students are introduced to basic pronunciation, vocabulary, and grammar fundamentals as essential elements in reading, writing, and understanding elementary Chinese. The course also includes study of culture, customs, philosophy, and history that serve as keys to studying the Chinese language. Students will view films focusing on the daily lives of people in China. Students will work individually and collaboratively to complete a variety of learning projects. Chinese is a Category V language, requiring 2200 hours of classroom instruction to become proficient. The proficiency goal by the end of the course is Novice Mid.
Counts as core elective credit
No Prerequisite

WOR101 Chinese II
1.0 Credit Year Course 10,11,12
This course continues to expand on the basics of pronunciation, vocabulary, and grammar fundamentals of speaking, reading, writing, and understanding Chinese. This course will use film and other multi-media resources to support a greater understanding of the cultures, customs, politics, and history of China. Students will continue to work individually and collaboratively to complete a variety of learning projects in both print and digital formats. The proficiency goal by the end of the course is Novice Mid- High.
Counts as core elective credit
Prerequisite: Successful in Chinese I

WOR102 Chinese III
1.0 Credit Year Course 11,12
This course builds on language skills developed in Chinese I and II. The course will complete and review basic grammar and key sentence patterns of Chinese, provide practice in the appropriate use of idiomatic expressions, and further develop skills in reading and writing Hanzi (Chinese characters). It will also build vocabulary, expand reading comprehension, and encourage extensive use of spoken Chinese for conversation and presentations. It will include additional aspects about Chinese culture (emphasis on Chinese cuisine) and history with a focus on Chinese immigration and the United States. The proficiency goal by the end of the course is Novice High - Intermediate Low.
Counts as core elective credit
Prerequisite: Successful in Chinese II

WOR103 Chinese IV
1.0 Credit Year Course 12
This course continues to build on the language skills with special emphasis on personal writing of students and reading of authentic text. Students will continue to work individually and collaboratively to complete learning projects using all language skills. Chinese films will continue to be incorporated to support a greater understanding of language (expanding vocabulary) and culture as reflections of historical and political events that impact the lives of Chinese. Students will also learn about the minority populations of China and the island nation of Taiwan. The proficiency goal by the end of the course is Intermediate Low.
Counts as core elective credit
Prerequisite: Successful in Chinese III

WOR104 French I
1.0 Credit Year Course 9,10,11,12
Students learn basic French language and culture. Topics include basic sentence structure, present tense, adjectives and vocabulary related to activities, food, family, clothing, and school. French is a Category I language, requiring 600 hours of classroom instruction to become proficient. The proficiency goal by the end of the course is Novice High.
Counts as core elective credit
No Prerequisite
WOR105 French II
1.0 Credit Year Course 10,11,12
Students expand the skills and vocabulary learned in French I. Topics include writing, reading past tense, shopping, travel, food, Paris and daily routine. The proficiency goal by the end of the course is Intermediate Low.
Counts as core elective credit
Prerequisite: Successful in French I

WOR106 French III
1.0 Credit Year Course 11,12
Students expand the skills and vocabulary learned in French II with more advanced writing, reading and presentation skills. Topics include travel, home, talking about the past, French celebrities, francophone nations, sports, and the imperfect tense. The proficiency goal by the end of the course is Intermediate Mid.
Counts as core elective credit
Prerequisite: Successful in French II

WOR107 French IV
1.0 Credit Year Course 12
Students expand the skills learned in French III including more advanced reading and writing practice, as well as increased speaking skills. Topics include the subjunctive, the future, the conditional, employment, travel, French literature, and French history. The proficiency goal by the end of the course is Intermediate High.
Counts as core elective credit
Prerequisite: Successful in French III

WOR108 German I
1.0 Credit Year Course 9,10,11,12
Students learn basic spoken and written German, primarily in present tense, as essential elements in reading, writing, speaking and listening. Focus is on vocabulary related to describing oneself, animals, family members, school subjects & schedules, telling time, money, work, hobbies and leisure time activities. German is a Category II language, requiring 750 hours of classroom instruction to become proficient. The proficiency goal by the end of the course is Novice High.
Counts as core elective credit
No Prerequisite

WOR109 German II
1.0 Credit Year Course 10,11,12
Students expand the skills and vocabulary acquired in German I, adding the spoken past tense and more difficult grammar rules. Topics include vocabulary relating to German homes, food, seasonal activities, body parts, clothes, illnesses, directions around a city, and travel. Knowledge is demonstrated through speaking, writing, reading and listening. The proficiency goal by the end of the course is Intermediate Low.
Counts as core elective credit
Prerequisite: Successful in German I

WOR110 German III
1.0 Credit Year Course 11,12
Students expand the skills acquired in German II, adding the written past tense, future tense, and more difficult grammar rules. Topics include vocabulary relating to travel, future plans, friendship, personal characteristics, and opinions. Knowledge is demonstrated through, writing, reading and presentation skills using literature and culture. The proficiency goal by the end of the course is Intermediate Mid.
Counts as core elective credit
Prerequisite: Successful in German II

WOR111 German IV
1.0 Credit Year Course 12
Students expand the skills acquired in German III, adding the imperative and subjunctive tenses, and more difficult grammar rules. Focus is on speaking, reading, listening and writing related to German music, movies, literature, politics, history, and other cultural topics. The proficiency goal by the end of the course is Intermediate Mid-High.
Counts as core elective credit
Prerequisite: Successful in German III
WOR112 Spanish I
1.0 Credit  Year Course  9,10,11,12
Students learn basic spoken and written Spanish. Focus is on vocabulary related to Spanish home, family, school, health, food, and leisure time activities. Spanish is a Category I language, requiring 600 hours of classroom instruction to become proficient. The proficiency goal by the end of the course is Novice High.
Counts as core elective credit
No Prerequisite

WOR113 Spanish II
1.0 Credit  Year Course  10,11,12
Students expand the skills learned in Spanish I. Topics include listening, vocabulary, culture, writing, reading and oral communication skills. The proficiency goal by the end of the course is Intermediate Low.
Counts as core elective credit
Prerequisite: Successful in Spanish I

WOR114 Spanish III
1.0 Credit  Year Course  11,12
Students expand the skills learned in Spanish II. Topics include vocabulary, culture, writing, reading and oral communication skills. The proficiency goal by the end of the course is Intermediate Mid.
Counts as core elective credit
Prerequisite: Successful in Spanish II

WOR115 Spanish IV
1.0 Credit  Year Course  12
Students expand the skills learned in Spanish III. Topics include vocabulary, culture, writing, reading and oral communication skills. The proficiency goal by the end of the course is Intermediate High.
Counts as core elective credit
Prerequisite: Successful in Spanish III

Other

OTH113 Peer Mentoring
1.0 Credit  Year Course  10,11,12
Students participate in mentoring and role modeling between middle school and high school students through a year long program. The goals of the program are to assist middle school students achieve academic, social, and behavioral goals, build lasting relationships, and transitional supports from middle school to high school.

Mentor and mentee will set SMART goals, complete a written analysis at semester, and meet periodically with a sponsor to present a portfolio at the end of the year. MHS students will transport themselves to a designated middle school during a free period or study hall at least twice a week.
Counts as core elective credit
Acceptance based on application
No Prerequisite

OTH101 Gifted and Talented Seminar
1.0 Credit  Year Course  9,10,11,12
This mostly online course utilizes an interdisciplinary approach where students will learn to research, assimilate, and respond through individual and group work. The instructional focus will require students to think critically about social, emotional, and global issues. This class is offered to GT students and is taught by the GT teacher. It is an online, blended formal. Online and face-to-face discussions will encourage students to make connections and explore relationships among different disciplines. Students will explore their own gifted identities and work to prepare for college.
Counts as core elective credit
Prerequisite: This class is for students who have previously been identified as Gifted/Talented in the Muscatine School District.