



# **Midland High School**

**108 W Webster Street**

**Wyoming, Iowa**



**2025-26**

## **Course Registration Handbook**

*School Board Approved 1/22/25*

Phone: 319-259-5340 FAX 563-488-2253

Website: [www.midland.k12.ia.us](http://www.midland.k12.ia.us)

PowerSchool: <https://midland.powerschool.com>

Name \_\_\_\_\_

## HOW TO USE THIS GUIDE

This guide has been developed by Midland High School and its purpose is to provide information about the courses which are offered at Midland. The guide is intended to help students and their parents become acquainted with the content of specific courses and to aid them in the decision making process during the registration period.

You have a responsibility to plan a realistic educational program. You are encouraged to study course descriptions, make use of instructors' and counselors' recommendations, and discuss these plans with your parents.

**You are expected to give serious consideration to this matter before deciding about specific courses because you will be expected to remain in the classes you select. Schedule changes are to remain at a minimum.**

Every effort will be made to accommodate your choices. Scheduling conflicts, the number of students registered for classes, and other administrative decisions could affect your final class schedule.

In this guide you will find a brief description of each of the courses offered at Midland High School. In addition, the length of each course and the grade level associated with each course are shown.

Prerequisites are listed when applicable. Prerequisites are conditions which must be met before enrollment, and they have been established to provide the maximum assurance that the courses will be completed successfully.

You are urged to read the descriptions, consider the recommendations made by your current instructors, discuss possible selections with your parents, and be prepared to make your **FINAL** course choices.

### MIDLAND COMMUNITY SCHOOL DISTRICT DIRECTORY INFORMATION

Phone: 319-259-5340 Fax: 563-488-2253

Secondary Principal: Bobby Willms

Board Members: Stacie Cronkleton, Scott Doll, Jeramie Ellefson,  
Sarah Fishwild, Lennie Miller, Patti Whitmarsh, Katie Sorgenfrey

### CAREER, ACADEMIC AND SOCIAL/EMOTIONAL COUNSELING

The day is rapidly coming when you will be entering the job market. Most of you will spend the majority of the rest of your life on the job. The job you get and how happy you will be with it depends on your interests and preparation. The courses taken in high school should be used to explore your interests and challenge your ability. You should plan your courses with your future in mind. If you would like help in deciding which courses to take, see the counselor. The counseling office is a good place to go if you would like information on occupations, military, trade schools, business schools or tech schools, colleges and universities or just to try out some new ideas on someone. The counseling office can help you with career, academic or social/emotional concerns.

## **RECOMMENDED COURSES FOR TECHNICAL OR UNIVERSITY ADMISSION**

### **TECHNICAL COLLEGE ADMISSION**

Technical college programs have admission standards and placement testing. Some programs have waiting lists. Apply early and seek your counselor's advice regarding your chosen program. Technical college preparation should include a comprehensive high school curriculum to ensure success.

For specific information regarding entrance requirements, please see your high school counselor. Applications and additional information is available in the Counseling Center.

### **FOUR YEAR COLLEGE/UNIVERSITY ADMISSION**

College programs have admission standards including grade point average, class rank, ACT scores and curriculum taken in high school. Apply early and seek your counselor's advice regarding your chosen program. College preparation should include a comprehensive high school/college prep curriculum to ensure success.

### **RAI (REGENT ADMISSION INDEX)**

If you are applying to Iowa State University, the University of Iowa, or the University of Northern Iowa, you will need a Regent Admissions Index (RAI) of at least 245 to be automatically admitted. The Board of Regents decided to discontinue the use of class rank in the RAI calculation to reflect changes occurring in Iowa's high schools. A growing number of high schools, both in Iowa and nationally, have dropped the use of class rank.

The RAI change will affect students who seek admission for summer 2020 and later. The new calculation is:

$$\begin{aligned} \text{RAI} = & \\ & (3 \times \text{ACT composite score}) \\ & + (30 \times \text{high school grade point average}) \\ & + 5 \times \text{number of high school courses completed in the core subject areas} \end{aligned}$$

## REGISTRATION NOTES

All students in grades 9-12 are required to enroll in 8 classes each semester (can include 1 study hall during senior year).

### Repeating a Class

A senior student may repeat one course per semester that he/she has already passed with the approval of the instructor, the administration, and his/her parents. They will not receive credit for this course.

If a required course is failed, it may be repeated once at Midland High School or it may be taken through APEX online. All APEX courses require administrative approval.

### STUDENT SCHEDULING & CHANGING COURSES

Students may elect to schedule for any Midland High School course with appropriate academic preparation and instructor permission. Students will be asked to select courses for the following year in early spring. In an effort to maximize the benefits of computer scheduling (especially in balancing class sizes) **ALL** schedule changes for the school year will need to be made by the following deadlines:

- ⇒ Spring course registration
- ⇒ August school registration dates
- ⇒ When finalized schedules are distributed
- ⇒ First 2 days of each semester

**No changes will be allowed after the end of the second day of each semester and all changes made during the two days must be for sound educational purposes!!**

Sound educational reasons may include, but are not limited to, the following and are at administration discretion:

- **Educational advancement** - Students who choose to take an advanced course such as an Alternate Concurrent may ask to be withdrawn from a high school elective course in order to pursue a college-credit course.
- **Requirement for graduation credit** - Students who need, due to a credit shortage, a course to fulfill graduation requirement may request a schedule change.
- **Failing a course** - Students who have failed a course may need to be scheduled into a course necessary for graduation requirement.
- **Missed scheduling** - Inevitably, there will be a time when a mistake is caught in a student schedule. This is usually flagged during annual credit checks. If a course is required for graduation credit, if a student is mistakenly placed in a course requiring a prerequisite that the student has not taken, if a student is short a course on their schedule, if students are overbooked into a particular course, they will require rescheduling.
- **Special education services** - If a student is in special education or is placed in special education services, it may require schedule revisions.
- **Revision of early graduation** - If a student was previously anticipating early graduation, and for whatever reason is unable to, it may require scheduling revisions.
- **Health issues of a student** - If a student, due to a health-related issue, is unable to meet the requirements of a class they have been scheduled for, it may require schedule revisions.

Use your parents, counselor, principal, and teachers as resource people to help you make your choices. They can help you make decisions about the future. Also, they can answer questions you have about courses and how they would benefit your career.

Student class schedules are established through a series of steps that include student choice and consultation with parents, counselors, and teachers.

- **Step 1** - Student meets with teacher-advisor to review scheduling process and begin course selection for each semester.
- **Step 2** - Student reviews scheduling plan with parent/guardian and completes course scheduling form.

- **Step 3** - Student meets with counselor to complete a schedule. Due to scheduling conflicts or classes at capacity, some students will not get their exact desired schedule. All students should have alternative classes in mind if this occurs.

Students who have major conflicts after the master schedule has been set will be contacted individually to make adjustments.

There are two semesters per year. Students will be able to earn a total of 64 credits over the course of four years. **Fifty-six (56) credits are required.**

All students must carry at least seven academic classes each semester or have the approval of the administration.

## **CAREER AND TECHNICAL EDUCATION (CTE) SAFETY**

Midland acknowledges that the safety of our students and staff is a priority. While safety throughout the building is of major concern, we recognize that the potential for physical harm is greater in CTE areas where students are using and/or in the vicinity of others using power tools, machinery, lab equipment, etc. Therefore, Midland CTE teachers will manage the risk of physical harm by:

- Regularly inspecting equipment in the lab or shop to ensure it is in safe operating order.
- Providing instruction and demonstrating the safe and proper operation procedures for each piece of power equipment, portable power hand tools, hand tools, cleaning, and/or finishing procedures, and lab equipment.
- Providing instruction in sanitation and safe food handling procedures.
- Maintaining order and control in the classroom and/or lab (shop).
- Assuring that all students pass a general shop or lab safety test with a score of 100 percent.

# MIDLAND HIGH SCHOOL GRADUATION REQUIREMENTS

## For students in graduating classes of 2026 and beyond

**Students are required to obtain 56 credits - 31 required and 25 elective**

**\*\*Must include one credit of a *Financial Literacy Equivalent***

Under the 8 period schedule there are a maximum of 64 credits available.

### Specific Graduation Requirements

#### **English - 8 credits including:**

- 2 credits - 9th grade - English Language Arts I
  - 2 credits - 10th grade - English Language Arts II
  - 2 credits - 11th grade - English Language Arts III
  - 2 credits - English electives
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#### **Science - 6 credits including:**

- 2 credits - Earth Science
  - 2 credits - Biology
  - 2 credits - Minimum requirement completed by end of 11th Grade - Chemistry or Botanical Science
- 

#### **Mathematics - 6 credits including:**

- 2 credits – Algebra I
  - 2 credits – Geometry
  - 2 credits – Math electives
- 

#### **Social Studies - 6 credits including:**

- 2 credits - 9th grade - US History 1877 – 1945, US History 1945 - 1975
  - 2 credits - 10th grade - World History 1341 – 1817, World History 1817 - 1991
  - 1 credit - Government
  - 1 credit – Social Studies Elective
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#### **Health - 1 credit – Health**

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#### **Physical Education – 4 credit (minimum)**

Iowa Law indicates that students must take PE each semester UNLESS:

- 1) Student is enrolled in a full academic day of courses (8 of 8)
- 2) Student is a participant in an organized athletic activity:  
Fall: Football, Volleyball, or Cross Country      Spring: Basketball, Wrestling, Track, Golf
- 3) Medical exemption
- 4) Religious exemption  
& a waiver is on file in the high school office.

PE courses include: Athlete Development, Fitness for Life, *Unified PE*

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#### **Financial Literacy - 1 credit completed by 12th grade from:**

Economics, Ag Business, or Financial Algebra

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#### **Electives – 25 credits**

- All other courses except drivers education

### **Independent Study**

Students with a serious schedule conflict and with teacher and administration approval will be allowed to take a course on an independent study basis.

### **Withdrawal from School**

A request to withdraw from school must be handled through a parent conference with administration. Under Iowa Law, a student must be 16 years of age by September 15 to be legally able to withdraw during that year.

### **Early Graduation Policy**

A student of Midland High School may graduate early provided:

- 1) Students may graduate prior to the completion of grade twelve if the coursework required for graduation has been fulfilled. In such cases, the students must have the approval of the board. An early graduation student may take courses at higher grade levels than their own as long as they do not disrupt the course of studies for the other students of that particular grade level or higher.
- 2) All students will need a total of **56** required credits to graduate. A student is able to earn a total of 8 credits per semester.
- 3) Students who have permission for early graduation WILL NOT be permitted to participate in any extracurricular activities after the student has completed his/her coursework. This includes athletic and music activities sponsored by state associations.
- 4) Students who graduate early will receive a diploma at the next regularly scheduled ceremony. The student may participate in the formal graduation exercises if he/she wishes to do so.

### **Late Graduation**

- 1) Students who do not have the necessary credits for graduation WILL NOT BE ALLOWED TO PARTICIPATE IN GRADUATION CEREMONIES.
- 2) The student may return to school the next semester and pick up only those credits necessary for graduation or may elect to complete these credits through correspondence courses with administration approval.
- 3) This student will have one year from the date of graduation to complete these credits under his/her class's graduation requirements. After one year he/she must meet the requirements of the current graduating class.
- 4) Said student who completes graduation requirements late will receive a diploma.

### **Senior Year Plus**

Through Senior Year Plus, school districts are provided with a variety of options to enhance students' high school experience. It was created to provide increased and more equal access to college credit and advancement placement courses. Courses delivered through Senior Year Plus provide students the opportunity to take a rigorous college curriculum and receive, in many cases, both high school and college credit concurrently. If you have specific questions please see your school counselor for more info.

Kirkwood Courses

Advanced Placement (AP) course

The following measures will be used to determine eligibility

Proficient Scores in Math (537), ELA (530), & Science (545) on ISASP (**10<sup>th</sup> Grade**)

Proficient Scores in Math (559) & ELA (561) on ISASP (**11<sup>th</sup> grade**) – 10<sup>th</sup> grade Science (545)

Proficient Scores in Reading (249) and English/Writing (254) Accuplacer Test

Proficient Scores in Math (19), Reading (18) & Science (18) on ACT Test

Proficiency in corresponding course work during high school career ("B" range or higher)

Less than 10% absence rate during previous school year.

\*\*IEP students will be subject to an IEP Team Review to determine eligibility under Senior Year Plus guidelines.

### **KIRKWOOD COURSE ENROLLMENT**

Eleventh and twelfth grade students enrolled in public and accredited nonpublic school districts are eligible to enroll in Kirkwood Courses as part of Senior Year Plus. *A ninth or tenth grade student who is identified as a gifted or talented student according to the school district's criteria and procedures are also eligible to enroll.* The specific purposes are to:

- ⇒ Promote rigorous academic pursuits; and
- ⇒ Provide a wider variety of options for students.

Students are allowed to enroll in eligible institutions of higher learning under the control of the State Board of Regents, a community college established under chapter 280A, Iowa Code, and accredited private institutions as defined in section 261.9, subsection 1, Iowa Code.

Post-secondary institutions may require students to meet appropriate standards or requirements for entrance into a course. Such requirements may include prerequisite courses, scores on SAT or ACT, or other evaluation procedures to determine competency. Acceptance of a student into a course by a post-secondary institution is not a guarantee that a student will be enrolled in all requested courses.

Students **must** take the Kirkwood course for credit and must meet all of the requirements of the course which are required of post-secondary students.

- ⇒ Evidence of successful completion of each course shall be included in the student's high school transcript and grade point average.

Students may not enroll in a course at a post-secondary institution if a comparable course is available at Midland.

### **Eligible Postsecondary Courses**

Postsecondary courses eligible for students to enroll in under this Act shall be limited to the following:

- Nonsectarian courses.
- Courses that are not comparable to courses offered by Midland Middle/High School.
- Credit-bearing courses that lead to an educational degree.
- Courses in the discipline areas of mathematics, science, social sciences, humanities, vocational-technical education and also the courses in career option programs offered by area schools established under the authorization provided in chapter 280A, Iowa Code.

When determining appropriate courses to enroll in under this Act, consideration should be given to courses in the following subject matter areas.

- ⇒ Literature, foreign languages, philosophy, civilizations, and history (including courses in music and art that include a component of history)
- ⇒ Anthropology, economics, geography, political science, psychology, and sociology.
- ⇒ Astronomy, biology, botany, chemistry, geology, physics, and zoology.
- ⇒ Computer science, mathematical sciences, and statistics.
- ⇒ Vocational-technical education course offerings.

### **SPECIAL NOTES REGARDING KIRKWOOD COURSES**

- Courses must be dropped within the first 2 weeks of the Kirkwood semester or student will receive a failing grade from Midland. College transcript may reflect failing grade or a "W" for withdrawal.
- All Kirkwood classes paid for by Midland are a part of the student's official transcript and will be counted towards GPA.
- Students will be allowed no more than one class period per day to take an online Kirkwood class without administrative approval. Students will only be allowed one Midland credit per Kirkwood course.
- Some colleges will not accept credit from another college if the grade is below a 'C'. It is your responsibility to check with the college you are interested in attending.



- *Kirkwood courses worth 3 college credits @ the 100 level or above = 4.5 quality points; 4 college credit classes @ 100 level or above = 5.0 quality points.*

<b>Grading and the Honor Roll</b>
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At the end of each quarter, students will receive computer-generated report cards. The semester grades will become a part of the student’s high school transcript and be used to compute the students Cumulative Grade Point Average (GPA). Grade point average is also used to determine other awards and recognition. Grades in all subjects will be used to compute the GPA. All courses will receive a value of one credit per semester when figuring the GPA with the exception of Drivers Ed which will not receive credit.

**Grade Point Average:** A student’s GPA will be reported on a modified grade scale.

**Quality Points to Determine Rank in Class**

Quality points will be used to determine rank. To compute a student’s rank in class, two groups of courses have been identified to carry special quality point weighting scales. Students who take the most weighted classes and earn the highest grades will achieve the highest rank in class.

**5.0 Scale of Quality Points**

The following courses will carry weighted quality points based on a five-point scale:

A = 5.0, B = 4.0, C = 3.0, F = 0

Calculus	Human Anatomy	Kirkwood Classes = 4 college credits at 100 level or above
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**4.5 Scale of Quality Points**

The following courses will carry weighted quality points based on a 4.5 point scale:

A = 4.5, B = 3.5, C = 2.5, F = 0

Precalculus	Physics	How College Works
Algebra III	Principles of Biomedical Science	Survey of the Animal Industry
Trigonometry	AP Computer Science Principles	Principles of Agronomy
Statistics	Architecture Plans & Specs	Kirkwood classes - 3 college credits at 100 level or above

**4.0 Scale of Quality Points**

All other courses will carry quality points based on a 4.0 point scale: A = 4.0, B = 3.0, C = 2.0, F = 0

**Midland Honor Roll**

Midland High School will compute and post an honor roll after each semester, there will be two semesters during the course of the school year. All subjects will be used to compute the honor roll.

- ◆ “Superior Honor Roll” will be for students who have a semester GPA of 3.85 or higher.
  - ◆ “Honor Roll” will be for students who have a semester GPA between 3.75 and 3.849.
  - ◆ “Improvement Honor Roll” will be for students who improve their GPA from one semester to the next.
- A cumulative class rank based on cumulative GPA’s will be computed and recorded following each semester.

**Academic Awards**

Academic awards are presented at the conclusion of each semester to those students whose **GPA for that semester is at least a 3.75**. Academic pins for each semester are presented as soon as possible following the semester.

## COURSE OFFERINGS FOR 2025-26

### AGRICULTURAL EDUCATION

CASE: Agriculture, Food & Natural Resources  
FFA Chapter Leadership & Development  
Ag Leadership                      Independent Ag  
Ag Business                         Sales & Marketing  
In The Kitchen                      Home Horticulture  
Natural Resources                  Food Processing  
CASE: Food Science and Safety  
Survey of the Animal Industry  
Principles of Agronomy

### COMPUTER SCIENCE

Explore Computer Science  
Computer Science Discoveries  
AP Computer Science Principles  
Computer Science Capstone  
WBL Project: Info Solutions  
Knight Moves

### FINE ARTS

Band                      Vocal  
Music Appreciation  
Drawing & Sketching  
GAP: Graphics, Animation & Photography  
Ceramics                 Advanced Ceramics  
Art History A    Art History B  
Painting                 Senior Art Studio

### FOREIGN LANGUAGE

Spanish I\*<sup>^</sup>, II\*<sup>^</sup>, III\*<sup>^</sup>, IV\*<sup>^</sup>

### HEALTH EDUCATION

Health I                      Health II  
Fitness for Life              Athlete Development  
AM Athlete Development

### INDUSTRIAL TECHNOLOGY

Construction Material Processing I  
Construction Material Processing II  
Advanced Construction Material Processing  
Timber Framing Construction  
Metals I                      Metals II  
Mechanical Drafting  
Architecture Plans & Specifications  
Home Improvement / Construction Technology

### LANGUAGE ARTS

ELA I\*<sup>^</sup>    ELA II\*<sup>^</sup>    ELA III\*<sup>^</sup>    ELA IV\*<sup>\*</sup>  
American Literature                      Film Criticism  
Creative Writing                          Composition\*<sup>^</sup>  
Mystery, Murder, & Detective Lit

### MATHEMATICS

Algebra I\*<sup>^</sup>                                  Geometry\*<sup>^</sup>  
Financial Algebra                         Algebra II\*<sup>^</sup>  
Statistics\*<sup>^</sup>                                 Trigonometry\*<sup>^</sup>  
Algebra III\*<sup>^</sup>                                Calculus\*<sup>^</sup>

### SCIENCE

Earth Science\*<sup>^</sup>                          Principles of Physics\*  
Biology\*<sup>^</sup>                                  Botanical Science\*<sup>^</sup>  
Chemistry\*<sup>^</sup>                                Physics\*<sup>^</sup>  
Human Anatomy & Phys\*<sup>^</sup>  
Principles of Biomedical Science\*  
Zoological Science\*<sup>^</sup>  
Scientific Research and Development\*

### SOCIAL STUDIES

Modern US History\*<sup>^</sup>                      Government\*<sup>^</sup>  
Psychology\*<sup>^</sup>  
Economics\*<sup>^</sup>                                 World History\*<sup>^</sup>  
Iowa History\*<sup>^</sup>                              US History in Film  
Current Events\*<sup>^</sup>                          History Through Sports  
Examining the Electoral College

### MISCELLANEOUS

How College Works                      Media Pathways  
Alg. 1 Math Lab                             Study Skills  
Library Aide                                 Science Aide  
Office Aide                                  Teacher's Aide  
Work Experience                          Practicum/Field Experience  
Kirkwood Options  
English as Second Language  
1 HS Study Hall (0 credits)  
Drivers Education (summer)

#### **NOTE:**

Not ALL courses will be offered each year. Decisions will be based on request numbers and staffing.

Some courses may be offered on an every other year rotation.

### **KIRKWOOD OFFERINGS: CAREER ACADEMIES** (some offered in AM, some PM)

Advanced Manufacturing w/ Robotics/Welding  
Architecture Construction, & Engineering (ACE)  
Automotive Technology  
Digital Arts, Social Media, and Marketing

Emergency Medical Technician & Fire Science  
Patient Care Exploration  
Pre-Med, Nursing, and Professional Health Careers  
Technology Careers

*Kirkwood Academies & Liberal Arts Pick and Choose Courses* -see pages 24-26

\*NCAA Approved Course for Division I and Division II    ^RAI Course

## AGRICULTURAL EDUCATION

### **CASE: Agriculture, Food, and Natural Resources 1031A/1031B (Full Year) Grades 9-12**

Students will experience hands-on activities, projects and problems. Student experiences will involve the study of communication, the science of agriculture, plants, animals, and natural resources while surveying the opportunities available in agriculture and natural resources. Students will learn to solve problems, conduct research, analyze data, work in teams, and take responsibility for their work, actions, and learning. Students will understand specific connections between their lessons and Supervised Agricultural Experience and FFA components.

### **Ag Leadership 1030 (1 Semester Course) Grades 9-12**

This course is designed to give the student a chance to express their communication and leadership skills. Students will work in groups to solve problems and situational scenarios to develop personal growth and human relation qualities. Students are expected to communicate, voice opinions, and concerns relating to goals and visions for personal development.

### **Home Horticulture 1070 (1 Semester Course) Grades 9-12**

Students explore areas of plant production and use focusing on decorative and aesthetic purposes. Information covered includes: care and propagation of plants, flowers, trees, and shrubs. Students will work with areas of landscape, design, and floriculture. Hands on experience will be used to cover information.

### **Natural Resources 1060 (1 Semester) Grade 9-12**

This course will provide students a variety of experiences in the fields of natural resources and ecology. Students will explore hands-on projects and activities while studying topics such as land use, water, soil, wildlife, and stewardship. The course will have students investigate current issues in ecosystem management, energy use and sources as well as pollution

### **Ag Business 1042 *\*\*Financial Literacy* (1 Semester Course) Grades 10-12**

This course introduces students to business management in agriculture. Throughout the course are practical and engaging activities, projects, and problems to develop and improve business and employability skills. Additionally, students investigate and develop viable business plans in order to solve local problems. The business plan ideas are communicated to student peers and members of the professional community. The course includes: • Starting a business • Financial documents • Risk management • Writing a business plan.

### **Sales & Marketing 1043 (1 Semester Course) Grades 10-12**

Students will learn the steps involved in setting up the sale, conducting the sale and closing a sale. Students will learn how to develop materials to promote products; to compare product; and to enhance features of products. Students will develop a sales presentation from start to finish. In addition to sales, students will learn all aspects of marketing a product. Students will have the opportunity to develop a media plan that promotes a product or business of their choice. In addition, students will work with graphic design, advertisements, evaluating different websites, and understanding what return on investment is and why it is important.

### **FFA: Chapter Leadership & Development 1095A/1095B (2 Semester Course) Grades 10-12**

This class is designed to allow for daily communication between four very important parts of the local FFA Chapter, the advisors, officers, committees, and general members. CLD is designed to allow for all of these areas to work together in a continuous manner that will allow for more chapter success. This class will work to lead and direct the Midland FFA Chapter and its partners towards the achievement of their goals. The class will be broken into the following areas: Chapter Officers, Program of Activities Committee Chairpersons, Program of Activities Committee Members. The Midland FFA Officer Team will be selected from the membership that registers for this class.

### **In The Kitchen 1073 (1 Semester Course) Grades 9-12**

This course is designed to help the student learn kitchen concepts including equipment, safety, and sanitation. Students will learn food preparation including cutting techniques, cooking methods, and mixing techniques. Students will also explore recipes and learn to make informed decisions in areas of nutrition, food selection, and preparation. Final project will have students exploring various cuisines.

### **Food Processing 1069 (1 Semester, 2 periods) *Prerequisite–In the Kitchen or Food Science* Grades 10-12**

This class will focus on the process of turning fresh foods into food products. Methods that will be explored through labs and hands-on activities include pasteurizing, freezing, fermenting, packaging, and cooking. Students will learn the process of canning, pickling, smoking, drying, and curing. This class will help students explore cooking beyond the microwave, stove and oven by working with various kitchen equipment as well as a grill and smoker. Be prepared to break down entire carcasses to make various consumer ready foods. Do you

want to learn the process from farm to fork, if so this is the class for you. Students are recommended to take *In the Kitchen* or *Food Science & Safety* before this class.

**CASE: Food Science and Safety 1034A/1034B (Full Year) Grades 11-12**

Students will complete hands-on activities, projects, and problems that simulate actual concepts and situations found in the food science and safety industry, allowing students to build content knowledge and technical skills. Students will investigate areas of food science including food safety, food chemistry, food processing, food product development, and marketing. Students will maintain a research level laboratory notebook throughout the class documenting their experiences in a laboratory. Research and experimental design will be highlighted as students develop and conduct industry appropriate investigations. *Prerequisite plant or animal or instructor approval.*

**Survey of the Animal Industry 1011 (Semester Course) Kirkwood Class on MHS campus Grades 11-12**

Introduces students to the various species and breeds of domestic animals and to create an understanding of the principles of food animal production, product marketing, and issues confronting the animal industry. *Quality points 4.5*

**Principles of Agronomy 1024 (Semester Course) Kirkwood Class on MHS campus Grades 11-12**

Provides a foundation course in agronomy. Applies crop, soil, and environmental sciences in understanding agricultural systems in the world. Introduces concepts of plant, soil, tillage, pest, environmental, and sustainable aspects of crop production. Includes hands-on learning experiences. *Quality points 4.5*

**Independent Ag 1012A/1012B (1 or 2 Semester Course) Grade 11-12**

*Instructor approval required.* This independent course allows students to explore a topic of interest related to agriculture, food, and natural resources. This course may serve as an opportunity for students to expand their expertise in a particular application, to explore a topic in greater detail, or to develop more advanced skills.

## COMPUTER SCIENCE

**Explore Computer Science 1069 (1 semester) Grades 9-12**

Exploring Computer Science explores human computer interaction, web design, computer programming, data modeling, and robotics. The focus is on problem solving, algorithm design, and programming within a context that is relevant to students' lives.

**Computer Science Discoveries 1236A/1236B (2 Semester Course) Grades 9-12**

Computer Science Discoveries is an introductory computer science course. The curriculum utilizes JavaScript programming environment for apps and games, HTML/CSS programming environment for website development and Adafruit's new Arduino based microcontroller for physical computing lessons programmed with JavaScript commands and blocks.

**AP Computer Science Principles 1234C/1234C (2 Semester Course) Prerequisite CSD Grades 10-12**

Computer Science Principles introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. More than a traditional introduction to programming, it is a rigorous, engaging, and approachable course that explores many of the foundational ideas of computing so all students understand how these concepts are transforming the world we live in. CS Principles complements CS Discoveries with a deeper focus on concepts such as how the internet works and the societal impacts of computer science. This year-long course is taught as an AP course. Prerequisite successfully complete Computer Science Discoveries or teacher approval if coding experience elsewhere. *Quality points = 4.5*

**Computer Science Capstone 1238A/1238B (1 or 2 semesters) Teacher approval required Grades 10-12**

Computer science topic is arranged with the teacher. Coursework will be designed with the teacher.

**WBL Project: Info Solutions 18221 (Spring semester) Kirkwood Class on MHS campus Grades 10-12**

Focuses on the concept of project-based learning in the workplace through the incorporation of basic project management, team building, and soft skills. Develops and implements projects in cooperation with local businesses, community organizations, or non-profit agencies in the Information Technology employment sector. Students will develop projects under the supervision of the instructor.

**Knight Moves Courses:** These courses are created through the partnership with Jones County Economic Development. These are online courses for students to work through independently with the guidance of the computer science teacher.

**Grades 9-12**

- **10160A Front End Web Design (1240A):** This is the first course in sequence. Learn the fundamentals of web development. Discover how to structure web pages using HTML, style them with CSS, and add interactivity with JavaScript. By the end, students will have the skills to create dynamic web pages from scratch.
- **10155A Java Programming (1240B):** Second course in sequence. Discover the principles of object-oriented programming while mastering the syntax and features of the C# language. By the end of this course, students will have a solid understanding of fundamental programming concepts and be ready to create programs using C#.
- **10160B Data Analytics (1240C):** Third course in sequence. Learn how to retrieve, manipulate, and analyze data using SQL queries, while also gaining insights into database management systems. By the end of this course, students will have the skills to harness the power of SQL for extracting meaningful insights from databases, empowering them to make data driven decisions.
- **10155B Java Programming 2 (1240D):** Fourth course in sequence. Develop secure APIs using advanced object oriented patterns modern C# features, and industry standard architectures. By the end of this course, students will have practical skills in dependency injection, testing, authentication, Entity Framework and the ability to build scalable enterprise applications with ASP.NET.

## FINE ARTS

**Drawing and Sketching 1110 (1 Semester Course) Grades 9-12**

This course is designed to further a student's knowledge of drawing and drawing media. We will learn to draw by learning to look. The class will be focused on experimenting with a variety of media and techniques.

**Art History A: Pre-historic through gothic periods 1105 (1 Semester Course) Grades 9-12**

This class will focus on learning the vocabulary of art and the process of looking at art. Art History A will look at art from prehistoric periods through the gothic era. (Offered alternating years, starting 2024-25)

**Art History B: Renaissance through modern periods 1106 (1 Semester Course) Grades 9-12**

This class will focus on expanding the visual vocabulary and the process of looking at art. Art History B will look at art from the time of the Italian Renaissance through Modern art movements. (Offered alternating years, starting 2025-26) *Art History A is recommended prerequisite.*

**Painting 1180 (1 Semester Course) Grades 9-12**

This course will introduce a variety of painting methods, styles, and media. Painting class will include an introduction to color theory, tempera, acrylic and oil painting. Ideas will be developed from life drawings, photographs, and inspired by Master Artists.

**Ceramics 1169 (1 Semester Course) Grades 9-12**

This course will introduce the methods and basics of pottery and ceramics creation. Students will learn hand building techniques such as pinch, coil, and slab construction along with the use of the potter's wheel. A variety of functional and sculptural pieces will be created throughout this course.

**Advanced Ceramics 1168 (1 Semester Course) Prerequisite ceramics. Grades 9-12**

This course will further explore the various ceramic construction methods, glazing, firing, and history of Ceramic production. Students will continue developing hand building techniques and skills, such as pinch, coil, and slab construction along with the use of the potter's wheel. Throughout this class we will have a greater focus on design in creating a variety of functional and sculptural pieces.

**GAP - Graphics, Animation, and Photography 1103 (1 Semester Course) Grades 9-12**

This course is designed to introduce students to graphic design, animation, and photography. Students will learn and apply the elements and principles of design, the basics of digital photography, and stop motion animation. Students will learn and use computer aided design, photo editing, and movie making.

**Senior Art Studio 1185 (1 or 2 Semester Course) Grade 12**

*Minimum grade of B in any previous art class and teacher approval are required prior to enrollment in this course.*

This course is highly independent. Students create art based around a variety of themes. The media for each artwork is selected by the student. This course requires intrinsic motivation and creativity.

**Music Appreciation 1915 (1 Semester Course) Grades 9-12**

This course will explore a wide variety of musical styles, forms, composers, instruments, and performers. Students will learn piano skills and participate in a class recital. Students will acquire the vocabulary, concepts and history necessary to critique/listen to music in an intellectual manner. Students will develop skills in analyzing, listening, and creating music in order to gain an understanding of, and respect for, the role and importance of music in their lives. These skills will aid the student in: responding emotionally and intelligently to a range of music representative of many styles and cultures; understanding the social uses of music and valuing music accordingly; recognizing music as an important marker of its time and culture; developing knowledge, understanding and respect for human musical achievements, and; acquiring an overview of their own music heritage, including the importance of music in all cultures.

**Band 1902A/1902B (Full Year Course – 1 credit/semester) Grades 9-12**

This course is available to all students under the eligibility rules established by the Iowa High School Music Association. The Midland Band meets every day and counts towards a student's GPA. The main objective of the band is to practice as a group and perform quality music that is enjoyable for them to play and perform. Individual lessons are also used during the week to improve student proficiency on their instrument when scheduled with their teacher. There are many performance opportunities during the school year. Pep Band, Concerts, and Small Group State Contest are possible performances. Other opportunities may be available for students to participate in such Solo and Small Group Music Contest and various Honor Bands.

**Vocal 1915A/1915B (Full Year Course – 1 credit/semester) Grades 9-12**

This course is available to all students under the eligibility rules established by the Iowa High School Music Association. The choral groups participate in school programs, community programs and present concerts each year. Individual lessons are also used during the week to improve student proficiency. Other opportunities may be available for students to participate in such Solo and Small Group Music Contest and various Honor Choirs.

**FOREIGN LANGUAGE**

**Spanish I 1500A/1500B (Full Year Course) (NCAA) (RAI) Grades 9-12**

This course will be a basic introduction to the language and culture of Spanish speaking countries. The four skills of communication: reading, writing, speaking, and listening will form the base of this course. An emphasis will also be given to obtaining an understanding of basic grammatical concepts and developing a vocabulary base in Spanish.

**Spanish II 1510A/1510B (Full Year Course) Prerequisite: Pass Spanish I Grades 10-12**

This course will be a continued study of the language and culture of Spanish-speaking countries. Grammar and vocabulary development will continue as well as an even greater emphasis on the oral and written skill. The present tense of verbs is reviewed, with extra practice given to the past tense. (NCAA) (RAI)

**Spanish III 1520A/1520B (Full Year Course) Prerequisite: Pass Spanish II Grades 11-12**

This course will develop more advanced grammar skills as well as fluency in writing, reading, speaking and listening. There will be review of the present and past tense with new practice in the future and conditional tenses. An emphasis will be given to daily conversation and applying Spanish to everyday uses. (NCAA)(RAI)

**Spanish IV 1530A/1530B (Full Year Course) Prerequisite: Pass Spanish III Grade 12 ONLY**

This course will provide a continued emphasis on fluency, using all speaking tenses in the target language. There will be group presentations in Spanish as well as the study of Spanish history, culture, and literature to help provide the base for this course. \*Successful completion of Spanish 4 = 2 social studies requirement credits awarded. (NCAA)(RAI)

## **HEALTH EDUCATION/ PHYSICAL EDUCATION**

*\*All students are required to have one PE class each semester UNLESS student completes a fall sport for semester 1 or a winter sport for semester two or have a full academic load AND complete a PE waiver form for office approval.*

### **Health I 1602 (1 Semester Course) Grade 10-12**

This required course is designed to provide the basis to help students adopt and maintain healthy behaviors. Health education should contribute directly to a student's ability to successfully practice behaviors that protect and promote health and avoid or reduce health risks. Students in this course will learn essential health concepts, determine personal values that support healthy behaviors and develop skills necessary to combat societal problems. Priority areas taught in this course include, promoting health and wellness, physical activity, healthy eating, promoting safety and preventing unintentional injury and violence, promoting mental and emotional health, a tobacco-free lifestyle, sexual education and an alcohol- and other drug-free lifestyle.

### **Health II 1615 (1 Semester Course) Prerequisite Health I Grades 10-12**

This course is designed as an extension of the Health I class. This class will expand knowledge gained through Health I and look more in depth with issues pertaining to upperclassman. Students will evaluate and analyze topics more in the framework of discussion, problem solving, and evaluation. Whereas Health I is more of an introduction course, this class will be more skill driven and prepare the student for proper decision making in regards to healthy life choices.

### **Fitness for Life 1621 (1 Semester Course) Grades 9-12**

This course is designed to present students with a well-balanced program in developing life-long fitness habits. Activities and course learning will be centered on recreational games, food and nutrition, and prevention of injuries.

### **Athlete Development 1622 (1 Semester Course) Grade 9-12**

The course is designed for aspiring or current athletes. Course content and activities focus on strength, agility, speed, and endurance training. In addition, students will learn about kinesiology, nutrition for athletes, and the prevention and treatment of sports related injuries.

### **AM Athlete Development 1604 (1 Semester Course) Grade 9-12**

The course is designed for aspiring or current athletes. Course will meet in the mornings on Mondays, Wednesdays, and Fridays in the Fitness Center. The class concentrates on weight training and is similar to the Athlete Development class.

## **INDUSTRIAL TECHNOLOGY** *All courses have section limit of 12 students.*

### **Construction Material Processing I 1082 (1 Semester Course) Grades 9-12**

Students will continue developing team building skills introduced in Introduction to ACE. This is the foundational course for the architecture and construction cluster. Students will learn proper construction terminology and safe instruction in hand and power tool usage through project construction. Students will experience plan development, reading project drawings, material identification, cost estimation and production.

### **Construction Material Processing II 1083 (1 Semester Course) Prerequisite: CMP I Grades 9-12**

This course will expand upon the skills and techniques acquired in Construction Materials Processing I. This course will concentrate on a required cabinetmaking project. Emphasis will be on advanced construction skills that will include hand and power tool usage, time management, interpreting plans and specs, material usage, estimating, problem solving and conflict resolution. Students will be completing an Entry Bench for a project.

### **Timber Framing Construction 1091 (1 Semester Course) Prerequisite: CMP I Grades 10-12**

Students will learn the planning, layout, and joinery necessary to construct a traditional timber frame (post and beam). The course begins with the basic mortise and tenon joint, and then expands on these techniques to cover through-tenons and shouldered mortises. In both thorough classroom sessions and hands-on experiences, you will explore the use of traditional tools and techniques of timber framing as well as adaptations using common and specialized modern tools. We will also discuss foundations, enclosing the frame, wiring and plumbing issues, and basic frame and joinery design. The course culminates with the raising of a full-sized timber frame completed by the group on the final day of class.

### **Advanced Construction Material Processing 1084 (1 Semester Course) Prerequisite: CMP II Grades 10-12**

This course is a more detailed study of knowledge gained in Construction Materials Processing I and II. Advanced joining and construction methods along with door and drawer construction, use of jigs and fixtures will be a focus.

Students will be required to design, plan and construct a project challenging their own individual woodworking ability. Student will pick an advanced project that is approved by instructor. Must have a great plan.

**Architectural Plan and Specifications 1089 (1 Semester Course)** *Prerequisite: Mechanical Drafting* **Grades 10-12**  
\*\*Quality points = 4.5 Introduces the skills and methods for understanding and interpreting construction drawings and technical specifications for residential and commercial buildings. 50% of all work will be on the computer. Concurrent enrollment class with Kirkwood Community College – CON-101 3 credits.

**Mechanical Drafting 1074 (1 Semester Course) Grades 9-12**  
The drafting course is designed to give students a general introduction of the principles and practices of drafting or making drawings for industrial use. This includes drawing in the following areas: orthographic, isometric, oblique, one and two point perspective, and surface developments.

**Metals I 1017 (1 Semester Course) Grades 9-12**  
Course gives students the opportunity to learn both from a lecture and hands-on approach. This course gives students the opportunity to build skills in the areas of shop safety, shield metal arc welding (SMAW), gas metal arc welding (GMAW), gas tungsten arc (GTAW), plasma cutting processes, sheet metal, metal casting, and machining along with the use of other metal shop machines and hand tools.

**Metals II 1018 (1 Semester Course) Prerequisite: Metals I Grade 10-12**  
This course will give students the opportunity to continue to build skills learned in the Metals I course in areas of SMAW, GMAW, GTAW, plasma cutting processes and machining along with the use of other metal shop machines and hand tools. Students will also learn the basics of C.A.D. to help model projects. Metals II is an advanced course, students are required to design and fabricate projects of interest.

**Home Improvement / Construction Technology 1025 (1 Semester Course) Prerequisite: CMP I Grades 10–12**  
This course is designed to give students an introduction to construction systems in today's society. Students will be responsible for the construction of individual and/or group project(s) built throughout the semester. The project(s) will be determined by the needs and wants of the class, community, and school district as well as the experience of the classmates involved. There will be a wide range of topics; Job-site safety, foundations, rough framing, building envelope, exterior finishes, interior finishes, MEP's (mechanicals, electrical, plumbing) and other topics within the construction cluster.

## LANGUAGE ARTS/ ENGLISH

**English Language Arts I 1300A/1300B (Full Year Course) Grade 9**  
Students will read and analyze a variety of short stories, poems, plays and novels. This class will also consist of writing a variety of papers, possibly including a research paper. In addition to reading and writing, speaking and listening will be a focus. (NCAA)(RAI)

**English Language Arts II 1320A/1320B (Full Year Course) Grade 10**  
This required course concentrates on reading, writing, speaking, and listening. Students will read, analyze, and evaluate short stories, plays, novels, non-fiction, and poetry. Students will also review the fundamentals of writing and develop a variety of papers and essays. (NCAA)(RAI)

**English Language Arts III 1338A/1338B (Full Year Course) Grade 11**  
Students will read and analyze a variety of pieces of American literature including short stories, novels, plays and poetry, with a focus on reading, writing, listening, speaking, and 21<sup>st</sup> century skills. Students will continue to hone and develop their writing skills with an emphasis on literary analysis of selected works. (NCAA)(RAI)

**English Language Arts IV 1332A/1332B (Full Year Course) Grade 12**  
This course will teach students communication skills—reading, writing, listening, speaking—concentrating on “real world” applications. This course will emphasize the practical application of communication as a business tool—using technical reports and manuals, business letters, resumes and applications. In addition, this course will emphasize language arts skills as applied to scholarly and literary materials. (NCAA)

**American Literature 1338 (1 semester course) Grades 9-12**  
American Literature explores the five periods of literature in America including: Colonial/Early National, Romantic, Realism/Naturalism, Modernist and Contemporary. This is accomplished through short story and novel analysis while focusing on critical thinking skills, written compositions, and oral discussions.



**Composition (Writing) 1334/1334B (Full Year Course) Grades 11 & 12**

Composition focuses on students' writing skills and the development of their ability to compose different types of papers for a range of purposes and audiences. This course enables students to explore and practice descriptive, narrative, persuasive, or expository styles as they write paragraphs, and essays. In addition, students will explore, develop and improve their technique and individual style in poetry, drama, short stories and other forms of prose. (NCAA)(RAI)

**Creative Writing 1310 (1 semester course) Grades 11 & 12**

Creative writing course will offer students the opportunity to develop and improve their technique and individual style in poetry, short story, drama, essays, and other forms of prose. The emphasis of the course is on writing, however, students will study exemplary writing from authors to obtain a fuller appreciation of the form and craft. For students who enjoy writing, this class provides an outlet for expression; at the same time it attempts to expose them to the complexities of contemporary fiction writing. Written compositions are required.

**Mystery, Murder, and Detective Literature 1315 (1 semester course) Grades 11 & 12**

This course is a study in the conventions of mystery and suspense stories, as well as the development as a genre of literature. Students will study short stories by early mystery and detective authors such as Edgar Allen Poe, Agatha Christie, Arthur Conan Doyle, and Ray Bradbury. This course will examine the history of the mystery, detective, and suspense stories in the Victorian era as well as modern writings. Written compositions will be required, as well as original compositions.

**Film Criticism 1396 (1 Semester) Grades 9-12**

Classic and modern films will be used to help students be more perceptive and critical viewers of the kinds of films that they already watch, as well as to expand their tastes to include a broader view of material. This class will cover the pertinent areas of the Iowa Core Curriculum literacy strand and will meet one of the required credits in English towards graduation.

## **MATHEMATICS**

**Algebra I 1825A/1825B (Full Year Course) Grades 9-10**

Algebra I has a scope far wider than traditional algebra books, highlighting applications, using statistics and geometry to develop the algebra of linear equations and inequalities, and including probability concepts in conjunction with algebraic fractions. Applications motivate virtually all lessons. Considerable attention is given to graphing. Manipulation with rational algebraic expressions is delayed until later courses. (NCAA)(RAI)

**Algebra I Lab 1807 (Full Year Course) (NOT MATH CREDIT - Elective credit!) Grade 9**

This lab class is designed to support students in Algebra 1. Along with addressing the Algebra 1 content, students will be developing math concepts to fill learning gaps that may exist to support future learning. The following criteria will be used to place students in the Algebra Lab: ISASP and/or aMath scores below proficiency, IEP math goal, teacher recommendation.

**Geometry 1830A / 1830B (Full Year Course) Prerequisite – Algebra I Grades 10-12**

This course is designed to emphasize the study of the properties and applications of common geometric figures in two and three dimensions. It includes the study of transformations, similarity and congruence, right triangle trigonometry, polygons, perimeter and area analysis, along with volume and surface area analysis. (NCAA)(RAI)

**Algebra II 1840A/1840B (Full Year Course) Prerequisite - Algebra I Grades 10-12**

This course emphasizes facility with algebraic expressions and forms, especially linear and quadratic forms, powers, and roots, and functions based on these concepts. Students study logarithmic, trigonometric, polynomial, and other special functions as tools for modeling real-world situations. The course applies geometrical ideas learned in the previous years, including transformations and measurement formulas. (NCAA)(RAI)

**Financial Algebra 1802A/1802B (Full Year Course) Prerequisite–Geometry Grades 10-12**

The NGPF Financial Algebra Course engages students with real-world financial applications while maintaining deep mathematical rigor. Each of the course's 10 units blends one core personal finance topic with one relevant math concept (e.g. Investing and Exponential Functions). This course covers Algebra 2 standards along with meeting the financial literacy standards that are required for graduation. \*\*Financial Literacy

**Algebra III 1895 (Semester| Fall) Quality points = 4.5 Prerequisite: Algebra II or Financial Algebra Grades: 10-12**

In this course, students will extend topics introduced in Algebra II and learn to manipulate and apply more advanced functions and algorithms. This course (in conjunction with Trigonometry) provides a mathematically sound foundation for students who intend to study Calculus. Topics include: linear, quadratic, polynomial, rational, exponential, and logarithmic functions, as well as an introduction to the limit process. (NCAA)(RAI)

**Trigonometry 1880 (Semester| Spring) Quality points = 4.5 Prerequisite: Algebra II or Financial Algebra Grades: 10-12**

In this course, students will extend topics introduced in Geometry and apply skills learned in Algebra II towards the study of trigonometry. This course (in conjunction with Algebra 3) provides a mathematically sound foundation for students who intend to study Calculus. Topics include: trigonometric applications, functions, graphs, identities and formulas, and equations, as well as the inverse trigonometric functions, polar functions and their applications. (NCAA)(RAI)

**Statistics 1870 (Semester) Quality points = 4.5 Prerequisite: Algebra II or Financial Algebra Grades: 10-12**

In this course, students will be exposed to various topics in elementary probability and statistical inference. This course provides a mathematically sound foundation for students who intend to pursue a two-year, four-year, or graduate level degree. Topics include: elementary probability, graphical techniques for presenting data, descriptive statistics, regression, correlation, estimation, and tests of significance. (NCAA)(RAI)

**Calculus 1850A/1850B Quality pts = 5.0 (Full Year Course) Prerequisite: Precalculus (Algebra 3 & Trig) Grade 12**

Calculus is roughly equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. This course covers topics in these areas, including concepts, skills, and applications of limits, derivatives, definite and indefinite integrals, and the Fundamental Theorem of Calculus. (NCAA)(RAI)

## SCIENCE

**Earth Science 2101A/2101B (Full Year Course) Grades 9-12**

This course investigates the environment on earth and the earth's environment in space. Units in the course cover the following topics: Origin of the Universe and the solar system; Earth's interior and plate tectonics; landscapes and surface processes; geological history and evolution of life; Earth-Sun-Moon system; weather; geography, climate and human cities. (NCAA)(RAI)

**Biology 2110A / 2110B (Full Year Course) Grades 9-12**

This course will help students examine the characteristics and relationships of living organisms to each other and their environment. Other aims include an introduction of the basic unit of living things (cells), the use of the microscope, and an awareness of the great variety of organisms and their significance in the world today. (NCAA)(RAI)

**Botanical Science 1033A/1033B (Full Year Course) Grades 10-12**

Students will learn how to apply scientific knowledge and skills to use plants effectively for agricultural and horticultural production. Students will discover the value of plant production and its impact on the individual, as well as the local and global economy. Lessons throughout the course will provide an overview of the field of agricultural science with a foundation in plant science. Students will work on major projects and problems similar to those that plant science specialists, such as horticulturalists, agronomists, greenhouse and nursery managers, and plant research specialists face in their respective careers. *Strongly recommend AFNR before taking this class.* (NCAA)(RAI)

**Principles of Physics 2160A/2160B (Full Year Course) Grades 10-12**

Agricultural Power and Technology is a foundation level course designed to prepare students for the wide array of career opportunities in agricultural engineering. Students are immersed in inquiry-based exercises that tie in the math and science of agricultural mechanics and engineering. Science standards addressed include structure and properties of matter, chemical reactions, nuclear processes, force & motion, interactions, conservation of energy & energy transfer, and more. (NCAA)

**Zoological Science 1032A/1032B (Full Year Course) Grades 10-12**

Student experiences will involve the study of animal anatomy, physiology, behavior, nutrition, reproduction, health, selection and marketing. Throughout the course students will consider the perceptions and preferences of individuals within local, regional, and world markets. Students will explore hands-on projects and activities to learn the characteristics of animal science and work on major projects and problems similar to those that animal

science specialists, such as veterinarians, zoologists, livestock producers, and industry personnel face in their respective careers. *Prerequisite AFNR or instructor approval.* (NCAA)(RAI)

**Principles of Biomedical Science 2126A / 2126B (Full Year Course) Prerequisite Biology Grades 10-12**

In this introductory class to the PLTW Biomedical Science Program, students explore concepts of biology and medicine to determine factors that led to the death of a fictional person. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes. *\*\*Quality Points = 4.5 (NCAA)*

**Chemistry 2120A / 2120B (Full Year Course) passed or currently enrolled in Algebra II Grades 11-12**

This course is recommended for **college bound** students. Students will study the foundations of Chemistry and the understanding of chemicals and how or why chemical reactions occur. The class will discuss atomic theory, the periodic table, stoichiometry, acid-base relationships, reduction/oxidation, gas laws, and thermodynamics. Class work and lab work coexist in this course to better reinforce the ideas of chemistry. (NCAA)(RAI)

**Human Anatomy & Physiology 2140AQ/2140BQ (Full Year Course) \*\*Quality points = 5.0 Grades 11-12**

This course is designed for the college bound student who plans to study in the areas of science, health, or physical education. The main subject areas are the major systems of the body; their structure and function. (NCAA)(RAI)

**Physics 2130AQ / 2130BQ (Full Year Course) Prerequisites - Algebra I & II Grades 11-12**

*\*\*Quality points = 4.5* This course will cover through reading, laboratory exercises, discussion, and problem solving the ideas of mechanics, motion, gravity, forms of energy, light, optics, electricity, and nuclear physics. (NCAA)(RAI)

**Scientific Research and Development 1046A/1046B (2 Semester Course) Grade 12**

This is an independent course and is only recommended for students who are highly motivated, organized and can work independently. The Agricultural Research and Development (ARD) course is the capstone designed to culminate students' experiences in agriculture, based on the pathway of study they pursued. Woven throughout the course are projects and problems based in practical applications and designed to develop and improve employability skills of students. Students will further enhance research, critical thinking, and teamwork skills as they expand on content knowledge from previous CASE courses. Students will work to solve complex, real-world problems through a focused research project. This process will include conducting research, data analysis and communication, and the development of new products. *Prerequisites: CASE: Agriculture, Food, and Natural Resources, Botanical Science or Zoological Science, and CASE Food Science and Safety.* (NCAA)

## SOCIAL STUDIES

**Modern US History 2225A/2225B (Two 1 Semester Courses) Grade 9**

These courses examine the history of the United States and include a historical review of political, military, scientific, and social development.

**US History 1877 – 1945 2225A** (NCAA)(RAI)

**US History 1945 – 1975 2225B** (NCAA)(RAI)

**World History 2230A/2230B (Two 1 Semester Courses) Grade 10**

**World History 1381 - 1817 2230A:** This course is designed to give students an understanding of ancient world history. It consists of a comprehensive study of world civilizations from the stone age to the Roman Empire. Regions studied include Egypt, Sumer, India, China, Greece, Rome and the Americas. (NCAA)

**World History 1817 - 1991 2230B:** This course is designed to give students an understanding of world history from the middle ages to the present. Topics include the Renaissance, imperialism, nationalism, through democracy and revolution. (NCAA)(RAI)

**Economics 2240 \*\*Financial Literacy (1 Semester Course) Grades 11-12**

This course is designed to prepare students for making the day to day business decisions of a consumer. Topics will include basic economic concepts, the operation of our economic system, supply and demand theory, finance and banking, labor and income relations, and the role of our government in the economy. (NCAA)

**Government 2250 (1 Semester Course) Grades 11-12**

This course is a functional study of American national government. Units studied include the presidency, congress, federal courts, civil rights, political parties, and political behavior and elections. (NCAA)

**Iowa History 2222 (1 Semester Course) Grade 9-12**  
This course examines the history, politics, economy, and culture of Iowa. The course may focus on the history of Iowa or may look into the contemporary issues affecting it. (NCAA)(RAI)

**Current Events 2245 (1 Semester Course) Grades 9-12**  
Current Events is a one-semester course structured to give the student an understanding of current issues in many areas of a political, social, and economic nature. The course emphasizes projects done by the student since the topics chosen are very fluid in their nature, meaning that the topics and the amount of coverage on the topics will fluctuate on any given day, week, or month depending on topics current in the media. (NCAA)(RAI)

**History Through Sports 2257 (1 Semester Course) Grades 10-12**  
The history of the United States cannot be told without a study of American Sports. This course studies the plight of African Americans in US history through baseball's Negro Leagues and segregation. We will study Women's representation through Title IX and women's sports. We will study health and safety protocols in sports through recent findings of CTE in football players and rule changes designed to protect players. Sports History and American History go hand-in-hand and this class allows students to learn about that parallel. Play Ball!

**Examining America's Electoral System 2251 (1 Semester Course) Grades 11-12**  
This civics course will develop an understanding of the current US electoral system. Students will examine changes that have been made and evaluate reforms that could be made.

**US History in Film 2221 (1 Semester Course) Grades 10-12**  
In this course students will examine U.S. history through the eye of history story tellers. The visual and oratory effects of a motion picture allow for greater understanding. Students will watch movies based on important historical events and time periods to gain a better understanding. Films may include, but are not limited to: "Lincoln," "Hidden Figures," "Saving Private Ryan," "Glory," "A Midwife's Tale," "Norma Rae," and "The Patriot."

**Psychology 2275 (1 Semester Course) Grades 11-12**  
This course examines the history and development of psychology, the brain and neurological functions, and individual personality. In addition, psychological research, famous psychologists, and their research are addressed. Other topics include sleep and dreams, as well as mental illness and other psychological disorders. (NCAA)(RAI)

### **MISCELLANEOUS**

**Media Pathways 1468 (Semester Course) Grades 9-12**  
Media Pathways is designed for high school students to understand, communicate, and adapt to a digital world as it impacts their personal life, society, and the business world. Students will develop foundational knowledge in digital imaging with hands-on activities and project focused tasks. Students will not only understand the concepts but apply their knowledge to situations. Various opportunities will be highlighted to expose students to emerging technologies impacting the digital world. Students will be able to choose their "Pathway", deciding which area to focus on each quarter, including photographing school events. Communication skills and practices, problem-solving, ethical and legal issues are taught in this course. This course can be taken multiple semesters.

**How College Works 1475 (Semester Course) Kirkwood Class on MHS campus Grades 10-12**  
This course explores individual strengths, strategies for solidifying personal responsibility, college readiness/academic success strategies, career readiness/vocational goals for students as they identify a college program or major. It emphasizes differences between high school and college expectations. Students will identify appropriate career areas. The class will offer aids in taking and using placement tests for college admission and personal financial management. *Quality points 4.5*

**Study Skills 1470 (Semester Course) Must be preapproved by office & teacher Grades 9-12**  
Study Skills is a class designed to help students improve learning effectiveness and motivation. This course provides each student with skills and strategies designed to facilitate academic success and to strengthen individual weaknesses. Students will also work independently on course assignments, receive direct instruction, and support from the study skills teacher(s) as needed.

**Teacher's Aide 0760 (1 Semester Course)** Must be preapproved by office & teacher **Grades 11-12**  
Offers students the opportunity to assist instructors in preparing, organizing, or delivering, course curricula or to assist in other duties. Students may provide tutorial or instructional assistance to other students. May be taken more than once with preapproval. (Pass/Fail)

**Library Aide 0745 (1 Semester Course)** *Must be preapproved see Miss Doll* **Grades 11-12**  
Library Aide courses provide students with the opportunity to work in the library or in media and audiovisual centers. Duties may include collecting, distributing, and categorizing materials; operating audiovisual equipment; assisting students and teachers; and performing clerical duties. Students typically gain experience in library science and/or media and audiovisual technology. *See Miss Doll for application.* (Pass/Fail)

**Office Aide 0740 (1 Semester Course)** *Limit 1 per semester per office, must be approved* **Grade 11-12**  
Office Aide courses provide students with the opportunity to work in campus offices, developing skills related to clerical office work. Duties may include, among others, typing, filing, recordkeeping, receiving visitors, answering the telephone, and duplicating. Emphasis is placed on appropriate work attitude, human relations, and proper office procedures. *Limited number, preference given to those with interest in business related field.* (Pass/Fail)

**Science Aide 0742 (1 Semester Course)** *Must be preapproved by teacher* **Grades 11-12**  
Course offers student the opportunity to assist instructor in preparing, organizing, or delivering course curricula. Students may provide tutorial or instructional assistance to other students and may serve as laboratory assistants. (Pass/Fail)  
*See science instructor for application.* (Pass/Fail)

**Practicum/Field Experience 5021 (1 Sem)** *Must apply & be approved - credits depend on hours completed* **Grades 11-12**  
Offered through Workplace Connections under the guidance of an instructor and employer mentor/supervisor. Provides an opportunity to learn in a work setting while obtaining practical experience in a chosen field of study. Includes job training and assignments designed to develop workplace communication skills, an understanding of industry and organizational structures, and problem solving skills in a work environment. 32 hours of on site learning with the business host and 8 hours of classroom work. College credits earned. (Pass/Fail)

**Work Experience 3090 (1 Sem Course)** *Must apply & be approved - credits depend on hours completed* **Grade 12**  
Students must secure their own employment and must be able to work 3 ½ hours per week per credit. Hours worked must be verifiable through formal documentation. Employer must be willing to complete evaluation of student performance and other required paperwork. Student will be required to meet with instructor periodically and complete reflective assignments. Student has opportunity to acquire new skills, apply classroom knowledge, and develop successful workplace behaviors. Student is responsible for transportation. Student may take 1-4 credit hours of work experience per semester. (Pass/Fail)

**Driver Education (summer course) 9998 0 credit** *14 years & have current IA drivers permit*  
This course is designed to teach students the correct attitudes and skills of operating a motor vehicle. The content consists of a minimum of 30 hours of classroom instruction & 6 hrs. of behind the wheel driving. Classes will be 2 hours long. The instructors will allow 2 excused absences from class and the 3rd will result in being dropped from the class and placed at the bottom of the priority list. *Any student who fails driver education will only be re-admitted with the principal's approval & availability of space in the class. A student who fails driver education will be charged tuition each time taken.* Course fee is determined by the board of directors each year and is due by the 1<sup>st</sup> day of class. Oldest students will have priority.

## Special Education

Students are staffed into a Resource Program or Self-Contained with Integration Program by evaluation of Grant Wood Area Education Agency. Credit is earned based on individual IEP's and/or classroom performance (assignments and exams). Each program is governed by state, federal and local guidelines. Credit earned in these programs can be applied toward graduation requirements.

Functional (or Transition) program is an IEP based program that focuses on independence within the community. Every student that participates in the program will have different goals based on their needs, thus the course descriptions are defined by the individual student's educational program. Reading, math, science, and language arts are taught throughout the functional curriculum with the primary focus on life skills.

- Granting a student in special education a Certificate of Achievement (or Completion or Attendance) is appropriate for a student who is not able to meet the academic requirements for a diploma. Bear in mind the following:
  - Such an award does not end the student's right to receive a free appropriate public education (FAPE). The right to a FAPE ends only either when the student reaches age 21 or successfully finishes a regular secondary education program. The same is true if a special education student obtains a high school equivalent diploma (HSED); if the student is not yet age 21, he or she may still demand a FAPE from the district of residence.
  - A district is not required to end a student's educational program when the student has met the district's graduation requirements if not all of the IEP goals have been met (unless the student has reached age 21).
  - A denial of a diploma to a student is NOT a denial of a FAPE.

# Kirkwood Academy Offerings 25-26

## Kirkwood College Credit in High School

Kirkwood offers opportunities for students to earn college credit while in high school at no cost to families. These courses are the perfect opportunity for students to get hands-on experience while gaining exposure to careers they want to pursue after graduation. All of the classes students take at Kirkwood are for both high school and college credit.

Students can earn college credit in high school through Kirkwood in a variety of ways. Options range from taking a class or two for transfer credit (within the walls of their high school, online or face-to-face at a Kirkwood location) to completing a sequence of courses in a Career Academy. Career Academies are packaged courses, offered at Regional Center locations, which focus on career exploration while also aligning with industry workforce needs. Students work through their high school counseling office or local Kirkwood Student Academic and Support Coordinator to find out what courses would be best for them and learn more about Career Academy offerings available.

The tentative Career Academy schedule for 2025-2026 is below. Unless noted otherwise, in addition to Career Academy selection students may also select one fall and one spring companion course.

### Academy schedule placement may be subject to change.

AM Academies meet each day from 8:30-10:30 a.m.

PM Academies meet each day from 12:30-3:00 p.m.

Companion Courses meet 3-4 days a week from 12:30-1:25 p.m.

### Advanced Manufacturing - AM & PM (16 credits) No companions. (8:00-10:30 or 12:30-3:00) Mon-Fri.

Intro to Safety & Health of Welders	WEL-228	1 credit
Gas Metal Arc Welding Spray Transfer	WEL-245	2 credits
Gas Metal Arc Welding Short Circuit Transfer	WEL-244	2 credits
Print Reading and Welding Symbol Interpretation–SENSE 1	WEL-233	3 credits
Gas Tungsten Arc Welding	WEL-251	2 credits
CNC Mill Operator–NIMS	MFG-173	2 credits
CNC Lathe Operator–NIMS	MFG-174	2 credits
Intro to Fabrication	WEL-208	2 credits

### Architecture, Construction & Engineering (Pre-Apprenticeship) – AM & PM (12 credits) No companions. (8:00-9:30 or 1:30-3:00) Mon-Fri

Construction Safety	CON-108	1 credit
Workplace Learning: Industrial Tech	WBL-148	2 credits
Architectural Plans & Specs	CON-101	3 credits
Structures and MEP	CON-313	3 credits
Construction Lab	CON-190	3 credits

### Automotive Technology AM & PM (17 credits) (8:00-10:30 or 12:30-3:00)

Technical Lab I	AUT-888	4 credits
Industrial Math	MAT-715	3 credits
Automotive Brake Systems	AUT-502	2 credits
Automotive Suspension and Steering	AUT-402	2 credits
Automotive Heating and Air Conditioning	AUT-702	2 credits
Technical Lab II	AUT-889	4 credits

### Digital Arts, Social Media, and Marketing PM only (12 credits) 1:30-3:00 Mon-Fri

Survey of Graphic Communication	GRA-101	3 credits
Principles of Marketing	MKT-110	3 credits
Emerging Technology Trends	BCA-179	3 credits
Social Media in Business	MKT-130	3 credits

**Patient Care Exploration AM (Fall) & PM (Spring) (6.5 credits) 8:00-9:30 (Fall) or 1:30-3:00 (Spring)**

Explorations of Healthcare Careers	HSC-205	3 credits
Nurse Aide	HSC-168	3.5 credits

**Pre-Med, Nursing and Professional Health Careers PM only (14 credits) 1:30-3:00 Mon-Fri**

Human Anatomy & Physiology I	BIO-168	4 credits
Human Anatomy & Physiology II	BIO-173	4 credits
Introduction to Psychology	PSY-111	3 credits
Developmental Psychology	PSY-121	3 credits

**Arts & Science AM & PM**

Composition I	ENG-105	3 credits	Fall Term
Fundamentals of Web Programming	CIS-207	3 credits	Fall Term
Introduction to Business	BUS-102	3 credits	Fall Term
Intro to Psychology	PSY-111	3 credits	Fall Term
Introduction to Ethics	PHI-105	3 credits	Fall Term
Principles of Marketing	MKT-110	3 credits	Fall Term
Public Speaking	SPC-112	3 credits	Fall Term
Statistics	MAT-156	3 credits	Fall Term
US History to 1877	HIS-151	3 credits	Fall Term
Composition II	ENG-106	3 credits	Spring Term
Cultural Anthropology	ANT-105	3 credits	Spring Term
Developmental Psychology	PSY-121	3 credits	Spring Term
Forms of Literature: Fiction	LIT-206	3 credits	Spring Term
Intro to Entrepreneurship	MGT-300	3 credits	Spring Term
Intro to Programming Logic	CIS-121	3 credits	Spring Term
Music Appreciation	MUS-100	3 credits	Spring Term
Principles of Macroeconomics	ECN-120	3 credits	Spring Term
Art Appreciation	ART-101	3 credits	Both Terms
Fundamentals of Oral Communication	SPC-101	3 credits	Both Terms
Intro to Sociology	SOC-110	3 credits	Both Terms
Survey of World Religions	REL-101	3 credits	Both Terms

**Companion Courses PM Academy Preliminary listing. Subject to change**

Exploring Teaching	EDU-110	3 credits	Fall Term
Intro to Criminal Justice	CRJ-100	3 credits	Fall Term
Intro to Parametric Solid Modeling	CAD-110	3 credits	Fall Term
Marriage & Family	SOC-120	3 credits	Fall Term
Medical Terminology	HSC-115	3 credits	Fall Term
Principles of Marketing	MKT-110	3 credits	Fall Term
Survey of World Religions	REL-101	3 credits	Fall Term
US History to 1877	HIS-151	3 credits	Fall Term
Behavior Management	EDU-119	3 credits	Spring Term
Cultural Anthropology	ANT-105	3 credits	Spring Term
Interior Design Topics	INT-312	3 credits	Spring Term
Intro to 3D Printing	CAD-168	3 credits	Spring Term
Nutrition	BIO-151	3 credits	Spring Term
Police & Society	CRG-121	3 credits	Spring Term
Project Management Basics	MGT-121	3 credits	Spring Term
Public Speaking	SPC-112	3 credits	Both Terms
Fundamentals of Oral Communication	SPC-101	3 credits	Both Terms

\*NCAA Approved Course ^RAI Approved Course



## NCAA – Division I and Division II Eligibility

Students need to be certified by the NCAA Eligibility Center to compete at an NCAA Division I or II school. You can create a certification account with the NCAA Eligibility Center at <https://web3.ncaa.org/ecwr3/>. Your eligibility begins during your freshmen year of high school by selecting courses which meet the requirements of the NCAA. Midland offers 38 NCAA eligible courses. Students can see which courses are eligible in the individual course descriptions.

The following pages contain a worksheet for students and parents for tracking Division I and Division II Eligibility.

### DIVISION I

This worksheet is provided to assist you in monitoring your progress in meeting NCAA initial-eligibility standards. The NCAA Eligibility Center will determine your academic status after you graduate. Remember to check Midland’s course handbook for our NCAA-approved courses for the classes you have taken. Each completed semester will count for .5 credits. **Use the following scale to determine quality points: A=4 quality points; B= 3 quality points; C=2 quality points; D (only Kirkwood courses) = 1 quality point.**

You must meet the required limits in each core area plus accumulate enough other courses to have a minimum of 32 semesters (16 total credits.)

#### English (8 semesters required)

Course Title	Credit	X	Grade	=	Quality Points(multiplied by grade)
Example: English I (Sem 1)	.5		A		(.5 x 4) = 2
<b>Total English Units</b>					<b>Total Quality Points _____</b>

#### Mathematics (6 semesters required)

Course Title	Credit	X	Grade	=	Quality Points (multiplied by grade)
<b>Total Mathematics Units</b>					<b>Total Quality Points _____</b>

Natural/Physical Science (4 semesters required)

Course Title	Credit	X	Grade	=	Quality Points (multiplied by grade)
<b>Total Science Units</b>					<b>Total Quality Points _____</b>

Social Science (4 semesters required)

Course Title	Credit	X	Grade	=	Quality Points (multiplied by grade)
<b>Total Social Science Units</b>					<b>Total Quality Points _____</b>

Spanish

Course Title	Credit	X	Grade	=	Quality Points (multiplied by grade)
<b>Total Spanish Units</b>					<b>Total Quality Points _____</b>

**Total**

Total Quality points from each subject area / Total Credits = Core-Course GPA					
	Quality Points	/	Credits	=	Core-Course GPA

## Division II

This worksheet is provide to assist you in monitoring your progress in meeting NCAA initial-eligibility standards. The NCAA Eligibility Center will determine your academic status after you graduate. Remember to check Midland's course handbook for our NCAA-approved courses for the classes you have taken. Each completed semester will count for .5 credits. **Use the following scale to determine quality points: A=4 quality points; B= 3 quality points; C=2 quality points; D (only Kirkwood courses) = 1 quality point.** You must meet the required limits in each core area plus accumulate enough other courses to have a minimum of 32 semesters (16 total credits.)

### English (6 semesters required)

Course Title	Credit	X	Grade	=	Quality Points(multiplied by grade)
Example: English I (Sem 1)	.5		A		(.5 x 4) = 2
<b>Total English Units</b>					<b>Total Quality Points _____</b>

### Mathematics (4 semesters required)

Course Title	Credit	X	Grade	=	Quality Points (multiplied by grade)
<b>Total Mathematics Units</b>					<b>Total Quality Points _____</b>

Natural/Physical Science (4 semesters required)

Course Title	Credit	X	Grade	=	Quality Points (multiplied by grade)
Total Science Units					Total Quality Points _____

Social Science (4 semesters required)

Course Title	Credit	X	Grade	=	Quality Points (multiplied by grade)
Total Social Science Units					Total Quality Points _____

Spanish

Course Title	Credit	X	Grade	=	Quality Points (multiplied by grade)
Total Spanish Units					Total Quality Points _____

Total

Total Quality points from each subject a					
Total Credits = Core-Course GPA					
	Quality Points	/	Credits	=	Core-Course GPA