

Mount Pleasant Community High School

Course Description Guide

2017-2018

Mount Pleasant Community High School
2104 South Grand Avenue
Mount Pleasant, Iowa 52641
319-385-7700 Phone
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Todd Liechty, Principal
Mike Wilson, Associate Principal
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If you have questions concerning your registration, please call
385-7700 ask for Student Services.

Mount Pleasant Community School District

www.mt-pleasant.k12.ia.us

Dear Students and Parents:

The MPCHS Course Description Booklet is intended as a resource for students and families as decisions are being made related to academic planning for the coming school year. It is recommended that you use the information contained in this booklet as but one resource available to you in choosing your courses.

Mount Pleasant Community High School recognizes the need for its students to be productive citizens. In order to become productive citizens, students must be informed and skilled in a wide range of academic areas. Therefore, you are required to take classes in a variety of subjects. We encourage you to take courses that will challenge you and prepare you for the future.

Every attempt has been made to provide accurate and descriptive information. When you select your courses please keep in mind your required courses and plan ahead for the following years. If you have questions concerning course descriptions, registration, credits, etc. please call the student services office at 385-7704 ext. 169.

We hope you will find this booklet to be both informative and useful. Please take the time and make an effort to choose your courses wisely.

Sincerely,

Todd Liechty,
High School Principal

EDUCATIONAL PHILOSOPHY

Mission Statement

"The mission of the Mount Pleasant Community School District is to empower students to achieve without limits."

We believe....

- the foundation of our decision making process will be what is best for students.
- our program will provide pathways for future success; students will have the ability to communicate, problem solve, and be skilled with technology.
- in a safe, secure, and nurturing environment where all members of the learning community demonstrate respect, compassion, and acceptance.
- students learn differently and will be engaged in learning experiences that meet their individual needs.
- the needs of each student will be met so they can grow physically, emotionally, and intellectually.
- a quality education is a shared responsibility that is achieved through meaningful collaboration among staff, students, families, and community members.
- Mount Pleasant students will receive a high quality educational experience. (global, world class)
- all students can learn when provided with proper support, motivation, and guidance.

Philosophy

The primary purpose of education in the Mt. Pleasant Community Schools is to help each student to develop the knowledge, skills, interests and the attitudes necessary to become a responsible contributing citizen.

Our school exists to serve students. The interests, needs, and welfare of the students are paramount in the planning, implementation, and evaluation of the curricular and co-curricular program.

All students can learn and find success in a safe and orderly environment, which is positive, supportive and encouraging. We understand that students learn in diverse ways and at different rates. We believe that learning is active. Learning is best achieved through doing. All students can learn much from one another.

Learning does not start or end with school but is a lifelong process shared with the home and the community. We are committed to work together for the betterment of our students and our community.

Mount Pleasant Community School District

Vision Statement

Mount Pleasant Community School District will create an environment dedicated to empowering all students to achieve individual excellence.

The vision will be supported by . . .

- State of the Art Facilities
- Community Partnerships
- Financial Stability
- Teaching and Learning Recruitment and Retention/Professional Development
- Innovation & Research
- Advanced Technology
- Healthy Nutritional Program
- Quality Transportation
- Student Learning & Opportunities Academic Programs Clubs
- Assessment/Accountability-(woven into each above category)

GENERAL INFORMATION

Student Services Office

Please contact Student Services (319/385-7700) for questions regarding the following areas:

1. Progress in classes
2. Credit counts and course requirements
3. Recommendations
4. Parent contacts and meetings
5. Teacher-counselor contacts and meetings
6. Registration
7. Schedule changes
8. Testing information (ACT/PSAT/ASVAB and AP Exams)

Additional services include: personal counseling, career information, ACT/SAT registration, college/university information and applications, scholarship and financial aid forms and information, and appointments with college, military, and technical school representatives.

Admissions

Any student who has successfully completed the eighth grade and has been recommended by the principal for promotion will be admitted into Mount Pleasant Community High School.

Credits

One credit is awarded per semester for each successfully completed course meeting within the regular weekly schedule. Courses meeting more or less than regularly scheduled classes will have their credits adjusted accordingly. **High School courses taken in the Middle School will not receive High School credit nor will they count in your GPA.**

Course Load

All students, *including seniors*, are **required** to take **six credit courses plus exercise science each semester**. MPCHS will be going to 7 class periods starting 2015-2016. Heavier course loads will be allowed and must be approved by the counselor or principal.

Incompletes

Unfinished work at the end of each quarter will receive a grade of "I" or incomplete. All unfinished work must be completed within two weeks from the end of that grading period. Unfinished work due to illness or other excused circumstance may be made up providing the student has made arrangements with the instructor.

Schedule Changes

Students may change their class schedule prior to the start of each semester. Changes will be granted only if the request is valid and there is room in the class. Valid requests include a recommended change in course level or a change in the program of studies due to a change in career interest. A student's work schedule will not warrant a schedule change. Students holding a job need to schedule their work outside of the school day. No student initiated schedule changes will be accepted after the completion of five school days into the semester unless it is a drop.

Dropping a Course

Students must be enrolled in six credits plus exercise science each semester. A student who drops a course after the starting date of each semester will receive a grade of "F" and be assigned to a study hall. Students taking courses in addition to the normal class load of six courses plus exercise science may drop a course without penalty up to three weeks after parent-teacher conferences. Students are not allowed to drop online or on-campus college classes after the date indicated on the enrollment form.

College Courses while in High School

1. It must be appropriate for the student to enroll in college level classes.
2. Students must be enrolled in and attending high school
3. Students must not have graduated from high school
4. Students must be making adequate progress toward graduation
5. Students must be proficient in math, reading, and science on the most recent administration of the Iowa Assessments. (formerly ITEDS) Alternate satisfactory scores from Compass test may be substituted if not proficient on the Iowa Assessments.
6. Students must complete the Enrollment and the Student/Parent Agreement form available in Student Services and return both forms by the due date.
7. Students must complete the college application requirements to enroll in a course.

Educational Options

OPTION	CREDIT	COUNTED IN GPA	GRADED OR PASS/FAIL
PSEO	Yes	Yes	Graded
Concurrent Enrollment	Yes	Yes	Graded
Correspondence	Yes w/prior approval	Yes	Graded
Independent Study	Yes w/prior approval	Yes	Graded
College Courses	Yes—elective only	Yes	Graded
Internship	Yes	No	Pass/Fail
AP Courses	Yes	Yes	Graded
Wisdom Quest	Yes	Yes	Graded

STANDARDIZED TESTS

Iowa Assessments (formerly ITEDS)

The Iowa Assessments are high school achievement tests that measure student performance in reading, spelling, writing, math, social studies and science. Students are compared to students of similar age in both Iowa and nationwide. The school uses this information to evaluate teaching standards and practices. All students in grades 9, 10, and 11 take the Iowa Assessment test during the month of February.

ACT

The American College Test (ACT) is used by four-year colleges and universities for admission and college course placement purposes. It measures the skills necessary for college work in English, Mathematics, Reading, and Science reasoning. The ACT is an optional test offered in September, October, December, February, April, and June. The deadline for registering for these tests is 5 weeks in advance of the test. Information regarding online registration is available in Student Services, students register online at www.actstudent.org. This website also has information about college planning and test preparation. It is recommended that students take the ACT in the spring of their junior year. This gives the student the opportunity to re-take the exam in the fall of their senior year if they choose. Either the ACT or the SAT is required for admissions to most four-year colleges and universities with 90% accepting the ACT for admission.

PLACEMENT TESTING

The COMPASS test is an untimed computer based test often required by two-year and community colleges to evaluate academic skills in math, reading, and writing. The COMPASS test is generally used as a placement exam to determine the appropriate college level courses for students. The COMPASS test is offered at the institution in which the student wants to enroll. Students can check in Student Services for more information or visit the ACT website at www.act.org/compass for test taking tips.

Southeastern Community College

ACCUPLACER tests are untimed, so you can move at a comfortable pace. It's important to give yourself enough time to do your best and complete the test because your results are the key factor in determining the courses you can take. Questions increase or decrease in difficulty depending on your answers as you work through the test. Your results will be available immediately after you take the test.

ALEKS Placement, Preparation and Learning (ALEKS PPL) offers colleges & universities a complete solution for math placement and course preparedness. Combining a research-based, accurate placement assessment with personalized learning tools to help students refresh on lost knowledge, ALEKS PPL gives students the opportunity to succeed before they even begin class.

PSAT/NMSQT

The Preliminary Scholastic Aptitude Test/National Merit Scholarship Test (PSAT/NMSQT) is used for the National Merit Scholarship competition. It is a practice SAT test which measures verbal and mathematical reasoning. It is an optional test for students in grade 11. Students who have previously scored very high on the Iowa Assessments are encouraged to take this test and the test is open to all juniors. Sophomores may also take the test. The National Merit Scholarship is very competitive – students must score in the 99+ percentile to be identified as semi-finalists. Colleges and universities also use the PSAT for scholarship competitions. The PSAT will be administered during October and costs approximately \$15.00. Students will be given the opportunity to sign up for this exam in the fall.

ASVAB

The Armed Services Vocational Aptitude Battery (ASVAB) is used by all branches of the military for job qualification. It measures general abilities in science, math, word knowledge, comprehension, and clerical tasks, as well as general knowledge of automobiles, mechanical and physical principals, and electricity. It also contains an interest inventory that can help students identify possible career interests. This test is optional for students in grades 11-12 and is free of charge. The ASVAB is administered by someone from the military and is offered at the High School in th fall or arranged by the student with a military recruiter.

IOWA REGENTS UNIVERSITIES ADMISSIONS REQUIREMENTS

To be considered for admission to Iowa Regents Universities:

1. Applicants must submit ACT or SAT score
2. Applicants must fulfill the course requirements for the institution (see below)
3. Applicants must have a Regent Admission Index (RAI) score of at least 245

Regents Admission Index

$$\text{RAI} = (2 \times \text{ACT composite score}) + (1 \times \text{high school percentile rank}) \\ + (20 \times \text{high school GPA}) + (5 \times \text{number of core courses})$$

For the purpose of calculating the RAI, composite ACT score has a top value of 36 (SAT scores will be converted to an ACT equivalent); High school rank is expressed as a percentile with 99% as the top value; GPA is expressed on a 4-point scale; high school core courses include courses in social studies, math, science, language arts, and foreign language. Regent's universities use the NCAA list of core courses to determine courses acceptable toward core course requirements. Year long courses are counted as one core course. Semester courses are counted as ½ core course.

Freshman students from Iowa high schools who have an RAI of at least 245 and who meet the minimum number of high school courses required by the universities will qualify for automatic admission. Freshman applicants who have an RAI of less than 245 *may* also be admitted; however, each Regent university will review these applications on an individual basis and the admission decision will be specific to each institution. Applicants who feel their academic record is not an accurate reflection of their potential for success are encouraged to provide supplemental information explaining their circumstances in addition to their application, academic transcripts, and test scores.

For more information regarding the Regents Admissions Index and to use the sample RAI calculator, visit the Iowa Board of Regents' website:

www2.state.ia.us/regents

You can also find admissions information by visiting the individual university websites:

Iowa State University

www.iastate.edu

University of Northern Iowa

www.uni.edu

University of Iowa

www.uiowa.edu

Subject Requirements for Admissions to Iowa Regents Universities

English/Language Arts	<p>Iowa State University 4 years of English/Language Arts emphasizing writing, speaking, reading, as well as an understanding and appreciation of literature.</p>	<p>University of Iowa 4 years, with an emphasis on the analysis and interpretation of literature, composition, and speech.</p>	<p>University of Northern Iowa 4 years, including one year of composition; may also include one year of speech, communication, or journalism.</p>
Math	<p>Iowa State University 3 years, including one year each of algebra, geometry, and advanced algebra.</p>	<p>University of Iowa 3 years, including two years of algebra and one year of geometry, for admission to the College of Liberal Arts and Sciences. 4 years, including two years of algebra, one year each of geometry higher math (trigonometry, analysis, or calculus), for admission to the College of Engineering.</p>	<p>University of Northern Iowa 3 years, including the equivalent of algebra, geometry, and advanced algebra.</p>
Natural Science	<p>Iowa State University 3 years, including one year each from any two of the following: biology, chemistry, and physics.</p>	<p>University of Iowa 3 years, including courses in physical science, biology, chemistry, environmental science and physics for admission to the College of Liberal Arts and Sciences. 3 years, with at least one year each in chemistry and physics, for admission to the College of Engineering. Nursing - 3 years including one year each of biology, chemistry and physics.</p>	<p>University of Northern Iowa 3 years, including courses in general science, biology, chemistry, earth science, or physics; laboratory experience highly recommended.</p>
Social Science	<p>Iowa State University 2 years for admission to the Colleges of Agriculture, Business, Design, Human Sciences, and Engineering. Three years for admission to the College of Liberal Arts and Sciences.</p>	<p>University of Iowa 3 years, with U.S. history and world history recommended for admission to the College of Liberal Arts and Sciences. 2 years, with U.S. history and world history recommended, for admission to the College of Engineering.</p>	<p>University of Northern Iowa 3 years, including courses in anthropology, economics, geography, government, history, psychology, or sociology.</p>
Foreign Language	<p>Iowa State University 2 years of a single foreign language for admission to the College of Liberal Arts and Sciences and the College of Engineering. Foreign language courses are not required for admission to the Colleges of Agriculture, Business, Design, or Human Sciences.</p>	<p>University of Iowa 2 years of a single foreign language are required for admission. For many degrees, the fourth year of proficiency is required for graduation. Nursing - 3 years in a single language or two years each in two different languages.</p>	<p>University of Northern Iowa Foreign language courses are not required for admission. However, two years of a foreign language in high school with a C- or above in the last term will meet the university graduation requirement.</p>
Other Courses	<p>Iowa State University Specific elective courses are not required for admission to Iowa State University.</p>	<p>University of Iowa Specific elective courses are not required for admission.</p>	<p>University of Northern Iowa Two years of additional courses from the required subject areas, foreign languages, or fine arts.</p>

GRADUATION REQUIREMENTS

Students receiving a Mount Pleasant Community High School diploma are required to earn 48 credits.

One credit is given per course for each successfully completed semester.

**Students must earn a minimum of 12 credits per year.
Students must complete all requirements before participating in graduation exercises.**

English—8 credits

English I—2 credits

English II—2 credits

English III—2 credits

English IV or AP English—2 credits

Mathematics—6 credits

Students must complete Algebra I, Geometry, and Algebra II either in Middle School or High School.

Social Studies—6 credits

American History —2 credits

Human Geography —2 credits

Social Studies Elective —1 credit

US Government—1 credit

Science—6 credits

Two credits must be from a life science and two credits must be from a physical science. Completion of biology and chemistry is required for admission to most 4-year colleges and universities. Students who do not take Physical Science must take Chemistry & Physics

Financial Literacy—1 credit

Students can fulfill the financial literacy credit with completion of Economics, Consumer Economics, or Personal Finance.

Exercise Science—4 credits

Students must enroll in and pass one half credit exercise science each semester

Electives—18 credits

COURSE OFFERINGS & REGISTRATION WORKSHEET

Use this sheet as a guide before filling out your registration form.

Mark the courses you plan to take next year. (y) = year long class (s) = semester class

ART

- Art Foundations (s) 9-12
- Drawing & Painting (s) 9-12
- Crafts (s) 9-12
- Sculpture I (s) 9-12
- Sculpture II (s) 10-12
- Art History (s) 10-12
- AP Studio Art (y) 11-12

BUSINESS

- Personal Computer (s) 9-12
- Personal Finance (s) 11-12
- Introduction to Business (y) 9-12
- Marketing (s) 10-12
- Accounting I (s) 11-12
- Accounting II (s) 11-12
- Business Law (s) 10-12
- Entrepreneurship (s) 10-12
- Workplace Readiness (s) 9-12

COMPUTER SCIENCE

- Computer Science I (y) 9-12
will be offered 18-19 school yr.
- Computer Science II (y) 9-12
will be offered 17-18 school yr.

CONSUMER/FAMILY SCIENCES

- Child Development I (s) 9-12
- Child Development II (s) 9-12
- Culinary Arts I (y) 9-12
- Culinary Arts II (y) 10-12
- Culinary Arts III (y) 11-12

EXERCISE SCIENCE

- Exercise (y) 9-12
- Advanced (y) 9-12
- Weight Training (y) 9-12

FINE ARTS

- Music Theory I (s) 10-12
- Music Theory II (s) 10-12
- Concert Band/Marching (s) 9-12
- Symphonic Band/Marching (s) 9-12
- Ninth Grade Choir (y) 9
- Concert Choir (y) 10-12
- Chamber Choir (y) 10-12

FOREIGN LANGUAGE

- Spanish I (y) 9-12
- Spanish II (y) 10-12
- Spanish III (y) 11-12
- Spanish IV (y) 12

HEALTH

- Health I (s) 9-12
- Health II (s) 9-12
- Med. Terminology (s) 11-12
- Nurse Aid (s) 11-12

INDUSTRIAL TECHNOLOGY/ ENGINEERING

- Auto Collision-Prep Saturday (s) 11-12
- Auto Collision-Damage Saturday (s) 11-12
- Intro to Auto Tech - (s) 9-12
- Automotive Brake Systems- (s) 9-12
- Manual Drivetrain - (s) 9-12
- Wood Tech I (s) 9-12
- Wood Tech II (s) 9-12
- Wood Tech III (s) 10-12
- Construction Tech (s) 10-12
- Building Trades (y) 12
- Computer Graphics I (s) 9-12
- Computer Graphics II (s) 10-12
- Electricity (s) 9-12
- Welding I (s) 9-12
- Welding II (s) 9-12

Project Lead the Way

- Intro. to Engineering (y) 9-12
- Principles of Engineering (y) 10-12
- Civil Eng/Architecture (y) 10-12
- Digital Electronics (y) 10-12

LANGUAGE ARTS

- Extended Literature (y) 9
- English I (y) 9
- Honors English I (y) 9
- Honors English II (y) 10
- AP English Lit/Comp (y) 11
- English II (y) 10
- English III (y) 11
- English IV (y) 12
- AP English Lang/Comp (y) 12
- Journalism (y) 10-12
- Creative Writing (s) 11-12
- Independent Reading (s) 11-12

MATHEMATICS

- Math Lab (y) 9-12
- Algebra I (y) 9-12
- Algebra II (y) 9-12
- Geometry (y) 9-12
- Trigonometry (s) 10-12
- Discrete Math (s) 11-12
- Pre-Calculus (y) 10-12
- AP Calculus AB (y) 11-12
- AP Calculus BC (y) 11-12
- AP Statistics (y) 11-12

SCIENCE

- Physical Science (y) 9-12
- Biology A (y) 9-12
- Biology B (y) 9-12
- Chemistry (y) 10-12
- AP Chemistry (y) 11-12
- AP Biology (y) 11-12
- Integrated Science I (s) 11-12
- Integrated Science II (s) 11-12
- Physics (y) 11-12
- Anatomy/Physiology (y) 11-12

SOCIAL STUDIES

- American History (y) 9
- Human Geography (y) 10
- World History I (s) 10-12
- World History II (s) 10-12
- Sociology (s) 10-12
- Psychology (s) 10-12
- Economics (s) 11-12
- Consumer Economics (s) 11-12
- AP US History-online (y) 11-12
- Government (s) 12

SPECIAL PROGRAMS

- APEX (s) 9-12
- Concurrent Enrollment (PACE)
- Internship (s/y) 12
- Special Education (s/y) 9-12
- Iowa Learning Online (s) 9-12
- PSEO - (s)

ART

ART FOUNDATIONS

Art Foundations covers a wide range of materials and methods. Drawing, painting, sculpture, crafts, and art history will be covered as well as different styles, artists, and careers. This is a basic art course with an emphasis on the elements and principles of design. Students will purchase supplies at times for specialized projects. **Grades: 9-12 Length: semester**

DRAWING & PAINTING

This course is designed for students that have previous knowledge of the elements and principles of Art and are interested in creating quality compositions from original ideas. Students will use a variety of drawing media such as pencil, chalk, ink and charcoal during the drawing portion of this class. While experimenting within the painting realm, students will be exploring with watercolor, acrylic and concentrated pigments. Art Foundations is highly recommended as a prerequisite. Students will purchase supplies at times for specialized projects. **Grades: 9-12 Length: semester Prerequisite: Art Foundations**

CRAFTS

This course is designed for students with an interest in creating original, handmade items using a variety of tools and materials. Students will explore bookbinding, papermaking, calligraphy, silk-screening and other unique materials. Crafts from different cultures are explored and produced. Importance is placed on cultural background, procedure, history and quality. Students must demonstrate a high degree of skill and quality; with an emphasis on dexterity and excellent construction abilities.

Grades: 9-12 Length: semester

SCULPTURE I

This course begins with the history of sculpture techniques. Students organize form and space through various approaches of modeling, carving, construction, additive, and subtractive processes. A variety of materials will be used including clay, plaster, paper, wood, and fiber. Art Foundations is highly recommended as a prerequisite. Students will purchase supplies at times for specialized projects. **Grades: 9-12 Length: semester**

SCULPTURE II

This course will build on the variety of media introduced in Sculpture I. Students will produce a portfolio representative of advanced construction. Elements and principles of design will be addressed with special attention to balance, form, texture, and space. Due to the advanced nature of the course, students enrolling in Sculpture II must have passed all prerequisites with a B- or better. Students will purchase their own supplies at times for specialized projects.

Grades: 10-12 Length: semester Prerequisite: Art Foundations and Sculpture I

ART HISTORY

Art History will teach students the visual analysis of works of art through elements, principles, and historical context. Students will use prior knowledge of elements and principles during visual analysis therefore; Art Foundations is a prerequisite, with Drawing & Painting strongly recommended. Class work will include essays, research, and completion of art projects related to significant units. Content will include ancient, medieval, renaissance, post modern, and multiple units devoted to other cultures. **Grades: 10-12 Length: semester Prerequisite: Art Foundations (Drawing & Painting is highly recommended)**

AP STUDIO ART

AP Studio Art is designed for students who are seriously interested in the practical experience of art. This course addresses the three major components of student art work: quality, concentration, and breadth. Students will create portfolios based on 2-D design including, but not limited to, drawing, painting, collage, weaving, printmaking, photography, digital imaging, and silkscreen. The submitted portfolio must include 20+ works that represent a mastery of design. Students have the opportunity to receive AP credit upon approval of their portfolios by the College Board. Students will need to work outside the classroom, maintain a sketchbook, and participate in group critiques. Due to the advanced nature of the course, students enrolling in AP Studio Art must have passed all prerequisites with a B- or better.

Grades: 11-12 Length: year Prerequisite: Art Foundations, Sculpture, Drawing & Painting, and Art History

BUSINESS

PERSONAL COMPUTER

This course is designed for the student who wants to learn the fundamentals of working with current software packages, moving beyond the introductory computer-literacy level. Students will gain experience with computer operating systems and common productivity packages including word processing, spreadsheets, presentations, and desktop publishing. The primary software package focused on will be Microsoft Office. **Grades: 9-12** **Length: semester**

PERSONAL FINANCE

Understanding and managing personal finances are keys to one's financial success. This course covers the essential knowledge and skills needed to make informed decisions about real world financial issues. Students will learn how choices influence occupational options and future earning potential. This course is designed to help students make wise spending, saving, and credit decisions and to make effective use of income to achieve personal financial success. This course fulfills the financial literacy requirement for class of 2015 and beyond. **Grades: 11-12** **Length: semester**

INTRODUCTION TO BUSINESS

Introduction to Business provides the student a broad background of the modern business world. The course will cover economic and social aspects, organization and management, operations, marketing functions, management control, decision making, financial risk, and career information for a changing business climate. **Grades: 9-12** **Length: year**

MARKETING

Marketing involves discovering what consumers want, making goods and services to satisfy those wants, and finding the best ways to price, promote, and distribute goods and services. Topics will include an overview of marketing, personal selling, promotion, and pricing. Students will create a promotional campaign that utilizes the different types of advertising media. **Grades: 10-12** **Length: semester** **Prerequisite: Introduction to Business**

BUSINESS LAW

Students will gain understanding of the law as it relates to them currently and the implications of the law in their future lives as well as the lives of their family and friends. They will also work to gain an understanding of the court system at the local, state and national level. Students will gain an understanding of the contract law, their rights and responsibilities as citizens, utilization of financial transactions, and employment and agency relationships. **Grades: 10-12** **Length: semester**

ENTREPRENEURSHIP

Entrepreneurship provides the student who has a strong desire to start a business with an understanding of the characteristics of the entrepreneur and the unique concepts of business ownership. Emphasis is place on identifying and evaluating entrepreneurial opportunities. Students will benefit from case studies and practical entrepreneurial experiences including interaction with successful Entrepreneurs. This course focuses on the student's entrepreneurial potential and creating a new business venture. **Grades: 10- 12** **Length: semester** **Prerequisite: Introduction to Business**

WORKPLACE READINESS

This course is directed toward preparing students for college and the workplace. Taught with group and individualized instruction, this class consists of units pertinent to current business trends including: career exploration, job-hunting, ethics, human relations, finance, communication, and utilization of computer software. **Grades: 9-12** **Length: semester**

PRINCIPLES OF ACCOUNTING I (ACC 131) - Must Complete SCC Jump Start Application

This first course in accounting introduces the basic terms, concepts, principles and procedures of the double entry system of accounting. This course is intended for students who will major in accounting or have chosen a career which requires extensive use of accounting information. It proceeds from business transactions of monetary nature, to books of original entry, through completion of the accounting cycle, to the preparation of financial statements. Attention is then given to more specific problems encountered in a merchandising business with the introduction of special journals for sales and cash receipts, purchases and cash disbursements. The course concludes with coverage of perpetual and periodic inventory systems: accounting for cash, receivables, payables, and systems of control. **Students must meet minimum scores in math and reading on the COMPASS or ACT to enroll in Accounting I. Grades: 11-12** **Length: Semester**
Prerequisite: Must Complete SCC Application – ACT/ Compass scores for Math and Reading

PRINCIPLES OF ACCOUNTING II (ACC132)

The Principles of Accounting II course will proceed through the recognition, valuation, and financial reporting requirements for merchandise inventory, fixed assets, intangibles, payroll, current liabilities, and long-term liabilities, before looking at specific issues related to corporations and partnerships. The course will conclude with coverage of the Statement of Cash Flows and financial statement analysis. Students completing this course will earn credit at MPCHS and Southeastern Community College.

Grades: 11-12 Length: Semester Prerequisite: Principles of Accounting I

COMPUTER SCIENCE

COMPUTER SCIENCE I (will be offered 2018-2019 school year)

Students in Computer Science I will learn the Visual Basic language from Microsoft. Students will develop mastery of variable representation, decision statements, looping structures, and interface design. As strong math skills are an advantage in programming, it is recommended that students be enrolled in Geometry or higher.

Grades: 9-12 Length: year Prerequisites: enrolled in Algebra II/Geometry

COMPUTER SCIENCE II (will be offered 2017-2018 school year)

Students in Computer Science II will learn the Java language from Oracle. Students will develop mastery of variable representation, decision statements, looping structures, and interface design. This class will introduce object-oriented programming. As strong math skills are an advantage in programming, it is recommended that students be enrolled in Geometry or higher.

Grades: 9-12 Length: year Prerequisites: Algebra II/Geometry - Computer Science I is NOT a prerequisite.

CONSUMER & FAMILY SCIENCES

CULINARY ARTS I

Students will learn how to prepare foods from all food groups and will learn planning and preparation of foods and meals that are nutritionally balanced and pleasing to the eyes and taste buds. Students will also focus on using different techniques and equipment in preparing regional and foreign foods through various cooking styles. Students will wear uniforms during labs.

Grades: 9-12 Length: year

CULINARY ARTS II

This course is designed to aid students in preparing for a career in the growing food service industry. Students will study the importance of accurate measuring while preparing pleasing and nutritionally balanced menus. Students in Culinary Arts II will enhance their techniques and proper use of equipment. Students will wear uniforms during labs. Students will wear uniforms during lab and must take a third party assessment for certification at the end of the course.

Grades: 10-12 Length: year Prerequisite: Culinary Arts I

CULINARY ARTS III

Advancing their preparation for successful careers in the food service industry students in Culinary Arts III will learn productive managerial practices, purchasing, inventory control and the art of customer service. Students will learn how to design and market a menu through various menu cycles (a la carte, table d'hôte, California, dujour, etc.). In addition, students learn how to alter recipes and bake a variety of desserts and goods. Students will learn techniques for selecting and preparing various meat, poultry, and seafood dishes. Students will wear uniforms during lab and must take a third party assessment for certification at the end of the course.

Grades: 11-12 Length: year Prerequisite: Culinary Arts II

CHILD DEVELOPMENT I

Students will discuss parenting roles and responsibilities and learn how the ovum develops from conception to birth. Family decisions, coping skills and contraception will all be discussed. Students will study family dynamics and the development of the child from birth to age three.

Grades: 9-12 Length: semester

CHILD DEVELOPMENT II

This course focuses on the growth and development of pre-school and kindergarten-age children. Parent roles, responsibilities, and coping skills are emphasized for each development stage.

Grades: 9-12 Length: semester Prerequisite: Do NOT have to take Child Development I

EXERCISE SCIENCE

EXERCISE SCIENCE

This course is designed to address the wellness needs of the students at MPCHS. The class focus will be improving individual fitness scores in body composition, cardiovascular, flexibility, agility, muscular strength and endurance. A variety of individual skills and group activities will also be taught to promote lifelong fitness. Students will be expected to dress and participate daily in these activities as well as receive information from various guest speakers on wellness related topics. **Grades: 9-12**

ADVANCED EXERCISE SCIENCE

This course is designed for the active student who seeks to be physically challenged daily, participates fully, and enjoys the competition within the boundaries of good sportsmanship. Classroom grading will reflect the increased expectations on the student's level of participation and effort. The class focus will be improving individual fitness scores in body composition, cardiovascular, flexibility, agility, muscular strength and endurance. A variety of individual skills and group activities will be taught to promote lifelong fitness. Students will be expected to dress and participate fully in these daily activities as well as receive information from various guest speakers on wellness related topics. **Grades: 9-12**

WEIGHT TRAINING

This course is designed for students to learn fitness concepts and conditioning techniques used for obtaining optimal fitness. Students will receive knowledge in proper lifting techniques, stretching, and the correlation of lifts to muscle groups to enhance performance. Students will utilize and become familiar with free weights, machines, bands, and medicine balls to promote lifelong activity. Students will be expected to dress daily and give maximum effort in their pursuit of improving body composition, flexibility, agility, cardiovascular, muscle strength and endurance. **Grades: 9-12**

FINE ARTS

CONCERT BAND/MARCHING

Consisting of instrumentalists in grades

9-12, Concert Band will rehearse daily and perform in several concerts during the year. All 9th grade members are required to take school band lessons. All other students may take lessons as their schedule permits or pass a music check at the end of each quarter. Some instruments are provided by the school. Most students provide their own instruments. Attendance at performances outside the school day is required. **Grades: 9-12 Length: semester Prerequisite: continuing**

band member or instructor permission

SYMPHONIC BAND/MARCHING

Entrance to Symphonic Band is gained through audition in the spring prior to the school year and is open to students in grades 9-12. All 9th grade members are required to take school band lessons. All other students may take lessons as their schedule permits or pass a music check at the end of each quarter. Some instruments are provided by the school. Most students provide their own instruments. Attendance at performances outside the school day is required.

Grades: 9-12 Length: semester Prerequisite: continuing band member or instructor permission

MUSIC THEORY I

Focusing on basic music structure students will learn melodic and harmonic writing and musical form. Enrollment is limited with upperclassmen given priority. Students must have two years prior involvement in a performance ensemble.

Grades: 10-12 Length: semester Prerequisite: 2 years prior involvement in a performance group

MUSIC THEORY II

This course will focus on advanced concepts of music structure (melodic and harmonic writing and musical form). Attention will be given to orchestration techniques and composition. Enrollment is limited with upperclassmen given priority.

Grades: 10-12 Length: semester Prerequisite: Music Theory I

NINTH GRADE CHOIR

Emphasis in Ninth Grade Choir will be placed on sight singing and developing proper singing technique through choral literature prepared for performance. Attendance at performances outside the school day is required.

Grades: 9 Length: year Prerequisite: continuing Choir member or instructor approval

CONCERT CHOIR

Emphasis in Concert Choir will be placed on sight singing, proper vocal technique, and singing a variety of choral styles. Concert Choir meets daily and includes four required performances during the year as well as participation in the conference vocal festival. **Grades: 10-12 Length: year Prerequisite: continuing Choir member or instructor approval**

CHAMBER CHOIR

An auditioned group meeting daily, Chamber Choir will perform at four concerts throughout the year and other performances as determined by the director. Emphasis is placed on sight singing, proper vocal technique, and singing a variety of advanced choral music. Participation in the All-State audition process and solo/ensemble contest is strongly encouraged. Membership in Chamber Choir is gained through audition in the spring prior to each school year.

Grades: 10-12 Length: year Prerequisite: audition or instructor approval

FOREIGN LANGUAGE

SPANISH I

In this beginning Spanish language course students will learn to speak, read, and write Spanish with an adequate and practical vocabulary. Students will talk about themselves, their interests, feelings, and activities, and role-play real-life situations.

Students will also study Spanish speaking countries and culture. **Grades: 9-12 Length: year**

SPANISH II

This course is designed to increase the ability to speak Spanish in direct conversation, to read Spanish with greater facility and comprehension, and to write Spanish correctly and creatively. Selected topics of culture will be explored.

Grades: 10-12 Length: year Prerequisite: Spanish I

SPANISH III

This course is designed to help students put into use all that they have learned in the past two years of study. Greater emphasis is placed on speaking and listening comprehension skills. Review and expansion of previously studied grammar is an integral part of this course. **Grades: 11-12 Length: year Prerequisite: Spanish II**

SPANISH IV

A high level language course, Spanish IV focuses on oral proficiency through an emphasis on oral activities. Students are encouraged to use the language more creatively and to participate in progressively challenging conversations. This course helps students strengthen their command of spoken and written Spanish through review and practice of basic structures. Students will read short stories and brief dramatic sketches by recognized Spanish authors in order to foster an appreciation of the literature and to strengthen reading skills. **Grades: 12 Length: year Prerequisite: Spanish III**

HEALTH SCIENCES

HEALTH I

An elective course for students wishing to enhance their health literacy, Health I will focus on information and skills necessary to become healthy adults. Students will learn how personal behaviors increase or decrease health risks throughout the lifespan. Students will research, discuss, and analyze topics including nutrition, reproduction, disease prevention, and human development. **Grades: 9-12** **Length: semester**

HEALTH II

Health II is an elective course designed for students to acquire information and skills necessary to become healthy adults in the family and community setting. Students will learn advocating for family and community health, health resources, and influences on health. Students will research, discuss, and analyze topics including: violence, public health, environmental health, safety and injury prevention, interpersonal relationships, family life, addictions, and mental health. It is recommended but not required for students to take Health I before enrolling in Health II. **Grades: 9-12** **Length: semester** **Prerequisite: Do NOT have to take Health I**

MEDICAL TERMINOLOGY - (Joint Enrollment with SCC)

This course is designed to study the basic language related to medical science with an emphasis on word analysis, construction, definition, pronunciations, spelling, and standard abbreviations. Superior attendance is required as student may be dropped from the course for lack of attendance. Students completing this course will earn credit at MPCHS and at Southeastern Community College. **Grades: 11-12** **Length: semester** **Prerequisite: Must Complete SCC Application**

NURSE AIDE - (Joint Enrollment with SCC)

Emphasis in this course is on students gaining a basic level of knowledge and demonstrating skills to provide safe, effective resident care. This course meets the Iowa Department of Inspection and Appeals requirements for nurse aides working in long-term care and skilled facilities. Upon completion, students are eligible to take the written/oral and skills performance competency tests to become a certified Nurse Aide. Superior attendance is required as students may be dropped from this class for lack of attendance. Students completing this course will receive credit at MPCHS and Southeastern Community College. **Grades: 11-12** **Length: semester** **Prerequisite: Must Complete SCC Application**

INDUSTRIAL ARTS & ENGINEERING

INTRODUCTION TO AUTO TECH SERVICE

Intro to Auto Tech **AUT-106**

1st 9 weeks

This course will serve as an introduction to the complete automotive field, including safety, ASE certification, employment potential, customer service, employer/employee relations and the parts and service industry.

FUNDAMENTALS OF AUTOMOTIVE SERVICING **AUT-126**

2nd 9 weeks

This course will familiarize students with basic scheduled maintenance. Proper usage of hand and power tools will be covered, as well as precision measuring systems and equipment. **A grade of C- or above in AUT-106**

Grades: 9-12 **Length: semester** **Prerequisite: Must Complete SCC Application**

MANUAL DRIVETRAINS I **AUT-244**

Fall Semester Only

This course will introduce the student to the concepts of front- and rear-wheel drive, four-wheel and all-wheel drive vehicles. Clutches, CV joints, and universal joints will also be covered. **Grades: 9-12** **Length: semester**

Prerequisite: A grade of C- or above in AUT-126

AUTOMOTIVE BRAKE SYSTEMS AUT-505**Spring Semester Only**

This course will explain and demonstrate the principles of friction and the components and operation of hydraulic brakes, including power and anti-lock brakes. **Grades: 9-12 Length: semester Prerequisite: A grade of C- or above in AUT-126**

WELDING I (Joint Enrollment with SCC)***Oxyacetylene Welding WEL -130*****Fall 1st 9 weeks**

To provide a thorough technical understanding of metallurgy, oxyacetylene welding, flame cutting and brazing fundamentals and to develop skills necessary to produce high quality fillet and square groove welds in steel plate. Students develop understanding of weld hazards and safety procedures throughout the course. Students completing this course will earn credit at MPCHS and Southeastern Community College.

GMAW Gas Metal Arc Welding WEL- 186**Fall 2nd 9 weeks**

Provides a technical understanding of the gas metal arc welding process, power sources and adjustment, metal transfer, shielding gases and weld safety. Develops skills necessary to produce high quality welds of 1/16" at 3/8" mild steel in all positions. Students will develop skills necessary to produce and bend-test single vee groove welds on 3/8" carbon steel in all positions according to American Welding Society code requirements. Students completing this course will earn credit at MPCHS and Southeastern Community College. - **Must Complete SCC Application Grades: 9-12 Length: Semester**

WELDING II (Joint Enrollment with SCC)***TIG GTAW Gas Tungsten Arc Welding WEL - 192*****Spring 1st 9 weeks**

Provides a thorough technical understanding of the TIG (Heliarc) process including metal characteristics, electrode, filler metals, and shielding gases with emphasis on weld safety and procedures. Prerequisite: completion of WEL-130 or equivalent. Students completing this course will earn credit at MPCHS and Southeastern Community College.

Arc Welding I (SMAW) WEL - 160**Spring 2nd 9 weeks**

Provides a thorough technical understanding of shielded metal arc welding fundamentals, weld hazards and weld safety, power sources and electrode selection. Provides ample time and direction to develop skills necessary to make high quality welds on 1/4" gauge to 3/4" mild steel in all positions. Students completing this course will earn credit at MPCHS and Southeastern Community College. **Grades: 9-12 Length: Semester - Prerequisite: Welding I**

WOOD TECHNOLOGY I Students in Wood Tech I will gain basic instruction and experience concerning tools, machines, and materials used in woodworking. Hands-on training and machine processes are employed in the completion of a number of optional and required projects. **Grades: 9-12 Length: semester**

WOOD TECHNOLOGY II

Students will build on skills learned in Wood Tech I and learn additional skills in woodworking and machine operation. Hands-on training and machine processes are employed in the completion of a minimum number of projects.

Grades: 9-12 Length: semester Prerequisite: Wood Technology I

WOOD TECHNOLOGY III

Students in Wood Technology III will build on the woodworking and machine operation skills learned in Wood Tech II. Drafting and woodworking will be incorporated as students complete a minimum number of projects. Students will have the opportunity to complete optional projects within course guidelines. **Grades: 10-12 Length: semester**

Prerequisite: Wood Technology II

CONSTRUCTION TECHNOLOGY

This is a fundamental course that explores the construction industry. Activities will focus on current building practices and technology and will include surveying, plumbing, electricity, and a small-scale house. Construction Tech is recommended for enrollment in Building Trades. **Grades: 10-12 Length: semester Prerequisite: Wood Technology III**

BUILDING TRADES (Joint Enrollment with SCC)

Focusing on the study of building concepts, this course will focus on learning current building practices. Building Trades provides practical, on-the-job experience of construction activities that include building a home. The finished product will be a marketable structure. Enrollment is limited to 15 students. **Must Complete SCC Application**

Fall Semester: Construction Safety (CON 108) Carpentry I (CON 147) Construction Printreading (CON 113)

Spring Semester: Carpentry II (CON 148) Construction Internship (CON 350) College credit will be earned for these courses.

Grades: 12 Length: semester/year Prerequisite: Construction Tech, Wood Tech I, Wood Tech II & III

ELECTRICITY

This course will explore topics related to electricity fundamentals with a focus on safety, theory, and calculations of basic electrical properties. Building on the primary functions of electricity, students will engage in hands-on class activities, labs, and projects to understand electrical concepts and equipment. Students will practice circuit building, basic soldering, and house wiring in the lab. **Grades: 9-12** **Length: semester** **Prerequisite: ALGEBRA I**

COMPUTER GRAPHICS I

Intended to promote computer literacy, students will work in a technology rich environment on projects that deal with graphics created with the computer. Students will work on using digital still cameras, photography techniques, photo editing, graphic design, web programming, creating web pages, and basic video editing. At the end of the course students will create an online portfolio documenting their work throughout the class. **Grades: 9-12** **Length: semester**

COMPUTER GRAPHICS II

Building on the foundation set in Computer Graphics I, Computer Graphics II is a lab class that expands the focus of computer graphics to include professional web pages, video game design, and advanced video editing techniques. Students will work in teams to develop web sites and videos in this project-based class. **Grades: 9-12** **Length: semester**
Prerequisite: Computer Graphics I



Project Lead the Way (PLTW) prepares students to be innovative and productive leaders, providing a rigorous and relevant education in Science, Technology, Engineering, and Mathematics (STEM). Through an engaging, hands-on curriculum, PLTW encourages the development of problem-solving skills, critical thinking, creative and innovative reasoning. STEM education is at the heart of today's high-tech, high-skill global economy. For America to remain economically competitive, our next generation of leaders must develop the critical-reasoning and problem-solving skills that will help make them the most productive in the world. PLTW, in partnership with high schools nationwide, sparks the ingenuity, creativity, and innovation within all of our students.

INTRODUCTION TO ENGINEERING DESIGN (EGT 400) (Joint Enrollment with SCC)

The major focus of this course is learning how to take an idea through the design process and how that process leads to a manufactured product. As students learn the various aspects of engineering and design they will apply their knowledge through activities, projects, and problems. Students will use CAD software to design solutions for different projects. Students will work in groups to solve problems, document solutions, and communicate their findings to others. Introduction to Engineering Design is the first course in the Project Lead the Way series.

Grades: 9-12 **Length: year** **Prerequisite: Must Complete SCC Application**

PRINCIPLES OF ENGINEERING

Building on what was learned in Introduction to Engineering Design; students in this second course of Project Lead the Way will explore the wide variety of careers in the fields of engineering, technology and manufacturing. Through class activities, research, and projects, students will learn how engineers use math, science, and technology in an engineering problem solving process. **Grades: 10-12** **Length: year** **Prerequisite: ALGEBRA I with a C average or better, and enrolled in at least one science course**

DIGITAL ELECTRONICS (EGT 420) (Joint Enrollment with SCC)

The third course in the Project Lead the Way series, Digital Electronics encompasses the application of electronic circuits and devices. Students will use simulation software to design and test digital circuitry prior to the actual construction of circuits and devices. Students will research, design, and evaluate projects individually and in small groups. To be successful, students should have passed Algebra I. **Grades: 10-12 Length: year Prerequisite: Electricity or Principles of Engineering Must Complete SCC Application**

CIVIL ENGINEERING & ARCHITECTURE

Students apply what they learn about various aspects of civil engineering and architecture to the design and development of a property. Working in teams, students explore hands-on activities and projects to learn the characteristics of civil engineering and architecture. In addition, students use 3D design software to help them design solutions to solve major course projects. Students learn about documenting their project, solving problems and communicating their solutions to their peers and members of the professional community of civil engineering and architecture. **Grades: 10-12 Length: year Prerequisite: Introduction to Engineering Design or Principles of Engineering and enrolled in or passed Algebra II**

LANGUAGE ARTS

EXTENDED LITERATURE

A required course for some students, Extended Literature is designed to help students improve their reading skills. This course will use a variety of methods to build vocabulary, reading comprehension, and writing skills. Extended Literature uses individual reading and instructor-led activities to improve reading ability. **Grades: 9 Length: year Prerequisite: recommendation**

ENGLISH I

A requirement for all 9th graders, students will read, analyze, and interpret a variety of literary materials including prose, poetry, novel, short story, and drama. Students will study the essentials of writing within correctness of expression. Emphasis is placed on organization, development, drafting, revision, and evaluation of written work. Students will also learn the basics of public speaking and will have opportunities to present in various formats. The Common Core will be used in the assessment of all assignments. **Grades: 9 Length: year**

HONORS ENGLISH I

This 9th grade honors class is designed for students who have demonstrated the exceptional ability to read, write, and analyze a variety of literary materials including ancient/modern drama, prose, poetry, etc. Students will study selected literature, essay writing, public speaking, and analysis. **Grades: 9 Length: year Prerequisite: teacher/counselor/principal approval**

ENGLISH II

All 10th grade students are required to enroll in English II. This course focuses on the basic skills of literary analysis and essay writing. Students will study the structure and characteristics of the short story, novel, ancient and modern drama, and nonfiction. Students will solidify skills in basic essay structure, steps of the writing process, and the elements of writing formal and informal essays. This course will also expect public speaking and collaboration for projects and presentations. The Common Core will be utilized for the content and assessment within the course.

Grades: 10 Length: year Prerequisite: English I

HONORS ENGLISH II

Honors English II will cover American literature from the colonial period to the present. Genres will include poetry, short stories, novels, and film. Multi-cultural authors will be studied with an emphasis on literary analysis and application of conventional essay forms. **Grades: 10 Length: year Prerequisite: teacher/counselor/principal approval**

ENGLISH III

Required for all 11th grade students, English III will cover American literature from the colonial period to the present. Genres will include poetry, short stories, novels, and film. Multi-cultural authors will be studied with an emphasis on literary analysis and application of conventional essay forms. **Grades: 11 Length: year Prerequisite: English II**

AP ENGLISH LITERATURE AND COMPOSITION

This honors class is designed for students who have demonstrated the exceptional ability to read and analyze a variety of literary materials. The course includes intensive study of representative works from various genres and periods, concentrating on works of recognized literary merit. In addition to considering a work's literary artistry, students reflect on the social and historical values it reflects and embodies. Writing is an integral part of the AP English Literature and Composition course. Writing assignments focus on the critical analysis of literature and include expository, analytical and argumentative essays.

Grades: 11 Length: year Prerequisite: Honors English I and II

ENGLISH IV

This required course is designed for students planning on attending two- and four-year colleges and will prepare students for college level courses in literature. Students will read a broad sampling of classic literature including novels, plays, poetry, and essays. Writing assignments will include critical analysis, opinion pieces, essays, and research. Basic grammar, punctuation, and usage contributing to good expression will be reviewed. **Grade: 12 Length: year Prerequisite: English III**

AP ENGLISH: LANGUAGE & COMPOSITION

Seniors in this honor elective perform college-level work that requires them to read and analyze a wide range of challenging texts, both nonfiction and fiction prose, with the purpose of studying rhetoric and how language works. This course is organized according to the requirements of the current AP English course description. Due to this, students are required to read critically, think analytically, and communicate clearly through a wide range of essay and speech assignments. AP English Language & Composition is designed for students who seek challenge both in the quality and quantity of work expected. Students have the opportunity to earn college credit by taking the AP exam in May. Practice tests for the AP exam will be administered in class. AP English fulfills the English IV requirement for graduation. **Grade: 12 Length: year**

Prerequisite: English III with a B average or better for both first and second semester

CREATIVE WRITING

In this elective English course students will analyze and interpret current literature, as well as their own work, in a writing-lab type environment. Students will produce original poetry, narrative essays, and fiction in addition to weekly journal entries and literary evaluations. **Grade: 11-12 Length: semester Prerequisite: Successful completion of English I & English II**

INDEPENDENT READING

An elective course for juniors and seniors, Independent Reading is a self-directed course where the student is able to choose his/her own reading material in addition to assigned readings. There are a variety of reading and writing assignments patterned after literature and writing skills from previous English courses. Requirements include reading fiction, nonfiction, and poetry. Students are required to write extensively about readings. **Grade: 11-12 Length: semester**

Prerequisite: successful completion of English I & English II

JOURNALISM

This course requires strong writing skills, basic computer knowledge, and attendance at various school events for photography purposes. Students who successfully complete one semester of journalism may apply for a position on the editorial board. Journalism students will publish the high school newspaper, The Maroon Echoes, and the yearbook, The Target. Coursework will include elements of design, advertising, digital photography, photojournalism, journalistic writing techniques, and business/sales training. Content of the publications will be written and designed under the guidelines of Iowa student press law. Journalism can be taken multiple times for credit. This course is challenging yet enjoyable and affords students opportunities they would not normally encounter in high school. **Grade: 10-12 Length: year**

MATHEMATICS

Students in the classes of 2017 and beyond will be required to take Algebra I, Geometry, and Algebra II prior to graduation.

MATH LAB

This lab period is designed to support students to be successful in Algebra I, Algebra II, and Geometry. Students will receive preteaching/reteaching, skill building, homework support and alternative teaching strategies. Math Lab will be a required course for some students. Teacher and/or Administrator recommendation is required for placement in this course.

Grade: 9-12 Length: year

ALGEBRA I

This course covers topics involving relationships between quantities, linear relationships, exponential and quadratic relationships, advanced functions and equations, and data analysis. Emphasis will be placed on logical thinking, communicating in mathematical terms, problem solving, and the use of technology. Other students will be added with instructor approval. **Grade: 9-12 Length: year**

ALGEBRA II

This course involves a deeper study of the topics covered in Algebra 1, as well as sequences, series, trigonometric functions, and trigonometric identities and equations. Emphasis will be placed on higher-order critical thinking and problem-solving skills while engaging in applications of the math content. **Grade: 9-12 Length: year Prerequisite: completion of Algebra 1 with a PASSING grade**

GEOMETRY

This course covers topics involving geometric structure, congruence, similarity, and measurement. Definitions, postulates, and theorems will be presented to use as justifications in proofs that will be written. Properties of two-dimensional and three-dimensional objects will be explored, studied, and proven. Applications of distance, midpoint, and slope formulas will be studied. **Grade: 9-12 Length: year Prerequisite: completion of Algebra 1 recommended**

PRE-CALCULUS

Designed for the student wishing to continue in scientific or mathematically related fields but beneficial to students entering liberal arts studies, Pre-Calculus will cover complex and real fields, polynomial, logarithmic, and exponential functions, analytic geometry, trigonometry, and other areas. Enrolling in Trigonometry by the fall of the same year as Pre-Calculus is strongly recommended. **Grade: 10-12 Length: year Prerequisite: Grade of C or better Algebra II**

AP CALCULUS AB

This course is designed to expose students to one semester of college calculus. Students have the opportunity to earn college credit if they take and score well on the AP exam offered in May. Students will review concepts learned in Pre-Calculus, learn to work with limits, and study the basic concepts of differential and integral calculus.

Grade: 11-12 Length: year Prerequisite: Pre-Calculus

AP CALCULUS BC

This course is an extension of the material presented in AP Calculus AB. After completion of Pre-Calculus, students choose to take either AB or BC, not both. This course exposes students to two semesters of college calculus by covering all the topics of AB, plus a few additional topics (such as parametric, polar, and vector forms; partial fractions; polynomial approximations and series). This course is designed for students who earned an A, or high B, in Pre-Calculus.

Grade: 11-12 Length: year Prerequisite: Pre-Calculus

TRIGONOMETRY

Appropriate for students planning a career in engineering or other fields in math and science, students in Trigonometry will solve both right and oblique triangles using trigonometric functions, Sines and Cosines. Students will work with solutions that can be either approximate from the calculator or must be exact involving fractions and radicals.

Grade: 10-12 Length: semester Prerequisite: Geometry or Instructor Approval

DISCRETE MATH

This semester course will allow students to employ practical applications of mathematics concepts. Topics may include business applications, data analysis, decision making, voting methods, statistical methods, and tools of technology.

Grade: 11-12 Length: semester Prerequisite: Geometry

AP STATISTICS

Students in AP Statistics will take the equivalent of one semester of college statistics. Students who take and score well on the AP exam may have the opportunity to earn college credit. Students will explore and analyze data, design experiments, plan studies, run simulations and use laws of probabilities to solve problems and make inferences from data.

Grade: 11-12 Length: year Prerequisite: Algebra II

SCIENCE

PHYSICAL SCIENCE

The purpose of this course is to present to the student how chemical and physical laws govern the environment. Course work will include lectures and lab activities showing interactions of matter and energy. **Grade: 9-12** **Length: year**

BIOLOGY A

This course will cover the concepts of photosynthesis, respiration, genetics, evolution and ecosystems, and other selected topics. Biology A consists of lecture, labs, and group activities and is designed for students who plan to pursue education beyond high school. **Grade: 9-12** **Length: year**

BIOLOGY B

Students will study general life processes, human systems, genetics, environmental biology, and cell biology. The class will consist of practical applications of biological processes. Biology B is designed for students who have difficulty in science. The style and pace of this course will enable most students to complete daily assignments in class.

Grade: 9-12 **Length: year** **Prerequisite: Approval from instructor or counselor**

ANATOMY & PHYSIOLOGY

Designed for students who have an interest in pursuing health related fields, Anatomy & Physiology will cover histology, bones, muscles, and systems of the body. Units will include complete dissection of a common mammal, basic athletic training, and disease cause and prevention. The course will consist of lecture, lab, and discussion activities.

Grade: 11-12 **Length: year** **Prerequisite: Biology A**

INTEGRATED SCIENCE I

This course covers the origins and formation of the universe, solar system, and Earth and how these operate and interact. Students will study geology, astronomy, and meteorology. Meeting MPCHS graduation requirements in science, this course will not count toward the requirements for admission to Iowa Regents Universities.

Grade: 11-12 **Length: semester** **Prerequisite: two years of science**

INTEGRATED SCIENCE II

Students in this course will study the relationships between the physical and living Earth. Students will study how humans have affected the Earth and the impact humans have on the Earth. Topics will include ecology, evolution and natural selection, management of natural resources, and managing the Earth as a closed system. This course meets MPCSD graduation requirements for science. This course will not count toward the science requirements for admission to Iowa Regents Universities. **Grade: 11-12** **Length: semester** **Prerequisite: two years of science**

CHEMISTRY

For students planning on post secondary education, Chemistry will develop an understanding and appreciation for the chemical makeup of the things around us. Major topics in chemistry will be covered with an emphasis on topics covered in post secondary schools. Class will include lecture, lab, and discussion activities. **Grade: 10-12** **Length: year**

Prerequisite: Biology A or Physical Science and Geometry

AP CHEMISTRY

This course is designed for the student who wants an in depth study of chemistry. More rigorous than Chemistry, emphasis is placed on chemical calculations and the formulations of principles. This class will prepare students for college-level chemistry and students will have the opportunity to earn college level credit by taking and scoring well on the AP exam offered in the spring. Students are often expected to complete lab work outside of normal school hours. **The first three review units will be completed by the student before school begins in August.**

Grade: 11-12 **Length: year** **Prerequisite: Chemistry and Algebra II**

PHYSICS

This course will give students an opportunity to work with the physical laws which exist in the world around them including force, motion, thermal energy, sound, light, etc. Students will solve and manipulate equations and use measured and calculated values to explain and understand the world around them. **Grade: 11-12** **Length: year**

Prerequisite: Integrated Math III/Algebra II and completion of two high school science courses

AP Biology

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. **Grades: 11 – 12** **Length: year** **Prerequisite: Biology / Enrolled in or Completed ALGEBRA II**

SOCIAL STUDIES

Students must complete American History, Human Geography, a Social Studies elective credit, and US Government. Social Studies elective credits include Psychology, Sociology, World History I/II, and Econ.

AMERICAN HISTORY

This is a year-long required course that provides an in-depth look at American History. The class begins with the events leading up to World War I and continues to present day. Using the textbook, primary and secondary sources and current events, students learn about the various political, social, and economic developments that have shaped and continue to shape the United States. **Grade: 9 and any student who has not met this requirement** **Length: year**

HUMAN GEOGRAPHY

Human Geography is a year-long, required class for all sophomores. Given the current state of affairs in the world today, it is imperative that we prepare our students to look beyond their local viewpoint and prepare them to become informed citizens of a more global world. This course is designed to cover topics of major importance in our world today. These topics will include basic geographic facts, major world religions, current population and migration trends, urbanization, comparison of standards of living around the world, cultural regions and globalization and its effects both locally and globally. Students will be asked to do some mapping in order to develop mental maps of the major countries and features of the earth's surface.

Grade: 10 and any student who has not met this requirement **Length: year** **Prerequisite: American History**

CONSUMER ECONOMICS

This course is recommended for all students and satisfies the Financial Literacy requirement. It also counts toward the Social Studies requirements for graduation. This course will give students a practical introduction to the American economic system. It will briefly cover Microeconomics and Macroeconomics. The focus of this course is on what students will need to know about the economy in their daily lives. Topics include the banking system (savings, credit), business organizations (entrepreneurship, investing), insurance, budgeting and retirement accounts. **Grade: 11-12** **Length: semester**

Prerequisite: American History, Human Geography

ECONOMICS

The purpose of this course is to give students an understanding of how the American economic system works. The course will include Microeconomics (Supply and Demand), Macroeconomics (GDP, Inflation, Unemployment) and important topics such as credit, investing, budgeting and job skills. This course is recommended for the student who is planning on pursuing post secondary education (colleges count it as a core course to meet entrance requirements). Economics satisfies the Financial Literacy requirement and it also counts toward the Social Studies requirements for graduation.

Grade: 11-12 **Length: semester** **Prerequisites: American History, Human Geography**

UNITED STATES GOVERNMENT

A required course for seniors, US Government will examine various aspects of government with an emphasis on understanding the structure of the government established by the constitution. Attention will be placed on understanding the rights and responsibilities of citizens. This course is required for graduation. **Grade: 12** **Length: semester** **Prerequisites:**

American History, Human Geography

WORLD HISTORY I

This course provides students with a background on ancient world history. World History I will focus on the early civilizations that emerged around the world and their histories until the beginning of European contact. Topics will include the early river civilizations, Greek and Roman empires, and the civilizations that emerged later. This course will fulfill the world studies elective required for graduation. **Grade: 10-12** **Length: semester** **Prerequisite: Enrolled in or Completed**

Human Geography

WORLD HISTORY II

This course focuses on the development of and major changes within Western Civilization from the Middle Ages to the colonial era. Topics will include the Renaissance, Reformation, European monarchies, the French Revolution and Napoleon, and Colonialism/Imperialism, all of which contributed to the development of the present nature of Western Civilization. World History I am NOT required for enrollment in World History II. This course will fulfill the world studies elective required for graduation. **Grade: 10-12 Length: semester Prerequisite: Enrolled in or Completed Human Geography**

SOCIOLOGY

An elective course for students who want to increase their understanding of how groups behave. Sociology introduces students to the scientific study of human social behavior. Topics will include interpersonal relationships, culture, conformity, roles, stratifications, institutions, and social problems. **Grade: 10-12 Length: semester**

PSYCHOLOGY

A class for students who want to prepare themselves for college level psychology courses. Psychology is an elective course dealing with the thought process and behavior of individuals. Specific areas of study will include history of psychology, the nervous system, learning and memory, sleep and dreams, and mental disorders. **Grade: 10-12 Length: semester**

AP US HISTORY

For students who want an in depth study of American History, AP US History will analyze and explore the economic, political, and social changes since Columbus. Taken online through the University of Iowa Belin-Blank APEX Learning, students will master historical knowledge and critical analysis, build communication skills, and discover how historical events have contributed to American culture. This course should only be taken by students who are serious about the study of American history and can commit the time and effort to an independent online course. Students and parents should note that students cannot drop this course once they enroll as federal dollars pay the registration through the University of Iowa. Students are also required to take the AP exam in May as a requirement of the federal grant. **Grade: 11-12**

Length: year Prerequisite: recommendation of instructor or administrator

SPECIAL PROGRAMS

ENGLISH AS A SECOND LANGUAGE

This course is designed to teach limited English proficient students the oral, reading, writing, and speaking skills needed to succeed in an environment where English is the primary language. Students who score as Non-English or limited-English speakers on the TELPA or ELPA-21 tests must enroll in this class for consecutive semesters until a mastery level is achieved. **Grade: 9-12 Length: TBD**

Prerequisite: score are a non- or limited-English in any of the four domains on the TELPA or ELPA-21 test

APEX CREDIT RECOVERY

Apex is a computer-based credit recovery program used by students who need to make up lost or failed credits in the areas of English, math, social studies, science and a limited number of electives. Students may use the Apex program for credit recovery of a semester class or one semester of a yearlong class. Students who fail both semesters of a yearlong course will retake the course the following year. MPCHS will only honor six credits earned in this manner to fulfill the 48 credits required for graduation. **Grade: 9-12 Length: TBD Prerequisite: counselor/ACE approval**

INTERNSHIP

For seniors who have decided on a specific career, an internship can give students valuable information about the working world. Students will learn specific career related skills, attitudes, and processes. Students will work one or two class periods per day and have the opportunity to participate in the internship for one or two semesters. Students are awarded credit for completing an internship but cannot count internship credit toward the 48 required credits for graduation. Students are graded on a pass/fail system and must provide their own transportation. **Grade: 12 Length: semester/year**

SPECIAL EDUCATION CLASSES

A variety of classes are offered for students who are staffed into special education programs. These classes will vary from semester to semester. Subjects range from career exploration, basic living skills, career exploration, study skills (CBR), reading, writing, and math skills. Students will work with their teachers and the counselor to select classes.

