Medford Area Senior High

"Ordinary is a Given. Greatness is Achieved"



Scheduling Handbook

For

2023-2024

November 2022

Dear Student(s) and Parents/Guardians:

We will soon begin scheduling for the 2023-2024 school year. Our steps for scheduling next year's 10th, 11th, and 12th graders are as follows:

- 1. Information in the form of this handbook is being distributed to students in their English classes where we will explain scheduling procedures, the Scheduling Handbook, and any special programs.
- 2. Students should discuss with parents/guardian what they want to take and prepare a tentative selection of classes, including four (4) alternates.
- 3. Students will meet with their counselor to discuss their course selections as they relate to their academic and career plan.

We hope that you will become involved in this process and that you will encourage your sons or daughters to make intelligent course selections that will be useful of their future.

We want to emphasize that it is <u>VERY IMPORTANT</u> that students select the courses they want now. Student requests will determine what courses are offered for the upcoming school year. Parents are asked to consider their son's/daughter's course selections carefully. Requests for students not to be assigned a specific teacher must be submitted in writing by June 1st to either the principal or student services office.

If you have any questions or concerns, please contact your son's/daughter's school counselor at the high school, 748-5951. Thank you.

Sincerely,

Tolea Kamm-Peissig Terrance Lybert
School Counselor
(Last names A-K) School Counselor
(Last names L-Z)

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GRADUATION REQUIREMENTS

In order to graduate from Medford Area Senior High students must accumulate 23 ¾ credits, and have passed the civics exam, and earned the required number of community service hours as outlined below. It is the responsibility of each student to see that he or she has completed all the below requirements by graduation.

Class of 2024, 2025, 2026 and 2027

- 1. Four (4) credits in English, including English 9 or Honors English 9, English 10 or Honors English 10, English Language, Honors English Language or AP English Language, and English Literature, Honors English Literature or AP English Literature.
- 2. Three (3) credits in Social Studies, including Human Geography or AP Human Geography, US Government or AP US Government, and US History or AP US History.
- 3. Three (3) credits of Science, including one credit each of Physical Science, Biology, and Chemistry.
- 4. Three (3) credits of Mathematics.
- 5. One and one-half (1.5) credits of Physical Education.
- 6. One-half (.5) credit for Health.
- 7. One-half (.5) credit of Financial Literacy.
- 8. One-quarter (.25) credit of Life Management.
- 9. One-half (.5) credit of Vocational Education.
- 10. One-half (.5) credit of Fine Arts.
- 11. Civics Exam.
- 12. Community Service Hours
 - Class of 2024 will serve 15 hours
 - Class of 2025 and subsequent classes will serve 20 hours
 - Any student moving into the district will have their hours prorated accordingly.
- Classes meeting the Vocational Education requirements are:
 - a. All Agriculture Department classes.
 - b. All Business Department classes, except Financial Literacy.
 - c. All Family and Consumer Sciences classes.
 - d. All Technology Education classes.
 - e. All Pre-Engineering classes.
 - f. Food Science I & II from the Science Department.
- Classes meeting the Fine Arts requirements are:
 - a. All Art Department classes.
 - b. All Music Department classes.
 - c. Drama from the English Department.

HIGH SCHOOL CLASS LOADS FOR 2023-2024

The following are the required courses and the required number of electives a student must take during the 2023-2024 school year. Students <u>must</u> carry 7 hours of class (no more than one study hall) regardless of how many credits they have accumulated. Any student failing a required course must repeat the course. **Any student wishing to take more than 7 credits per year must have honors study hall status or need the credits in order to graduate.**

FRES	English 9 or Honors English 9 Mathematics as assigned Physical Science or Honors Physical Science Human Geography or AP Human Geography Physical Education (9/10 Recommended) Drivers Education (Optional) Life Management Elective Credits TOTAL	25 2.0 - 2.5 6.75-7.0
SOPH	English 10 or Honors English 10 Mathematics Biology or Honors Biology US Government or AP US Government Health Physical Education Elective credits TOTAL	1.0 1.0 1.0 1.0 .5 .5 or 0 1.5 – 2.0 7.0
JUNI	<u>OR</u>	CREDIT
<u>JUNI</u>	OR English Language, Honors English Language	CREDIT
JUNI		CREDIT 1.0
JUNI	English Language, Honors English Language	
JUNIO	English Language, Honors English Language or AP English Language	1.0
JUNIO	English Language, Honors English Language or AP English Language Mathematics	1.0
JUNIO	English Language, Honors English Language or AP English Language Mathematics Applied Chemistry, Chemistry or	1.0 1.0
JUNIO	English Language, Honors English Language or AP English Language Mathematics Applied Chemistry, Chemistry or Honors Chemistry	1.0 1.0
JUNI	English Language, Honors English Language or AP English Language Mathematics Applied Chemistry, Chemistry or Honors Chemistry US History or AP US History	1.0 1.0 1.0 1.0
JUNI	English Language, Honors English Language or AP English Language Mathematics Applied Chemistry, Chemistry or Honors Chemistry US History or AP US History Physical Education	1.0 1.0 1.0 1.0 1.0 .5 or 0
JUNIO	English Language, Honors English Language or AP English Language Mathematics Applied Chemistry, Chemistry or Honors Chemistry US History or AP US History Physical Education Elective credits TOTAL	1.0 1.0 1.0 1.0 .5 or 0 2.5 – 3.0
	English Language, Honors English Language or AP English Language Mathematics Applied Chemistry, Chemistry or Honors Chemistry US History or AP US History Physical Education Elective credits TOTAL	1.0 1.0 1.0 1.0 .5 or 0 2.5 – 3.0 7.0
	English Language, Honors English Language or AP English Language Mathematics Applied Chemistry, Chemistry or Honors Chemistry US History or AP US History Physical Education Elective credits TOTAL	1.0 1.0 1.0 1.0 .5 or 0 2.5 – 3.0 7.0
	English Language, Honors English Language or AP English Language Mathematics Applied Chemistry, Chemistry or Honors Chemistry US History or AP US History Physical Education Elective credits TOTAL DR English Literature, Honors English Literature	1.0 1.0 1.0 1.0 .5 or 0 2.5 – 3.0 7.0
	English Language, Honors English Language or AP English Language Mathematics Applied Chemistry, Chemistry or Honors Chemistry US History or AP US History Physical Education Elective credits TOTAL DR English Literature, Honors English Literature or AP English Literature	1.0 1.0 1.0 1.0 .5 or 0 2.5 – 3.0 7.0 CREDIT
	English Language, Honors English Language or AP English Language Mathematics Applied Chemistry, Chemistry or Honors Chemistry US History or AP US History Physical Education Elective credits TOTAL OR English Literature, Honors English Literature or AP English Literature Financial Literacy	1.0 1.0 1.0 1.0 .5 or 0 2.5 – 3.0 7.0 CREDIT 1.0 .5
	English Language, Honors English Language or AP English Language Mathematics Applied Chemistry, Chemistry or Honors Chemistry US History or AP US History Physical Education Elective credits TOTAL OR English Literature, Honors English Literature or AP English Literature Financial Literacy Physical Education	1.0 1.0 1.0 1.0 .5 or 0 2.5 – 3.0 7.0 CREDIT 1.0 .5 .5 or 0

COURSE SELECTIONS

Course offerings/titles listed in this handbook reflect the most accurate information available at the time of printing. Changes in course availability may occur due to budgeting considerations, teacher utilization, student scheduling choices, or other factors.

On the following pages...

GRADE indicates the grade levels at which a course may be taken.

YEAR OR SEMESTER indicates the length of the course.

<u>PREREQUISITE</u> indicates the course(s) that must be successfully completed before entering the described course.

Unless otherwise indicated, students will be awarded one-half (.5) credit for a semester course and one (1) credit for a year-long course.

AGRICULTURE

<u>Exploratory AgriScience</u> – How does AGRICULTURE affect my life? Learn about the importance of agriculture to everyone! This course is an excellent way to be introduced to the many different aspects of agriculture and the FFA. Topics will include diversity of agriculture, biotechnology, careers, FFA, leadership skills, Supervised Agriculture Experience (SAE), plant science, animal science, and natural resources. Recommended for students who haven't had Agriculture 8.

Gr. 9-12 Semester Prerequisite: none

<u>Horse and Small Animal Science</u> – deals with equine management and services along with pet (dogs, cats, rabbits, etc.) care and management. Nutrition, grooming, pedigrees, and other factors are studied. Some information will be included on veterinary careers.

Gr. 9-12 Semester Prerequisite: none

<u>Fish and Wildlife 1</u> – In this course we will study game and non-game species of mammals, waterfowl, and fish. The course will study the ecology, habits, habitat, and life cycles of various species of wildlife and fish.

Gr. 9-12 Semester Prerequisite: none

<u>Horticulture-Plants & You</u> – Do you have a green thumb? If not, that's okay! In this course you will build a strong foundation for soil and plant science concepts by working inside the greenhouse and outdoor on landscaping projects and gardens. Students will learn general care for houseplants, fertilization, build corsages, floral arrangements, as well as learn about soil, terrariums, propagation methods, wreathmaking, and helping out school and community gardens/landscape.

Gr. 9-12 Semester Prerequisite: none

<u>Production Animal Science</u> – is the study of livestock (cattle, swine, sheep, poultry, etc.) industry, animal nutrition and feeding, judging and classification, and the meat industry. Students will also be participating in hands-on animal labs.

Gr. 10-12 Semester Prerequisite: none

Fish and Wildlife 2 – In this course we will continue to learn about concepts talked about in Fish and Wildlife 1. Topics covered will include hands-on labs and real life application such as taxidermy, fish bait making, trapping, tanning, processing, and natural resource experiments.

Gr. 11-12 Semester Prerequisite: Fish and Wildlife 1

<u>Dairy Production</u> – includes all phases of the dairy industry, including feeding, breeding, housing, health, records, and dairy careers. This course may offer transcripted/dual credit through Northcentral Technical College. (Refer to Special Programming Options on Page 36 for more information.)

Gr. 11-12 Semester Prerequisite: none

Veterinary Science – Explore parts of the veterinary field by learning basic veterinary terminology and identifying veterinary equipment. Learn how to handle and restrain various animas and give a basic physical examination of those animals. Learn about animal diseases and parasites including their diagnosis and treatment. Students will practice basic hands-on procedures with classroom animals. This course may offer transcripted/dual credit through Northcentral Technical College. (Refer to Special Programming Options on Page 38 for more information.)

Prerequisite: Horse and Small Animal Science Gr. 11-12 Semester

Forestry – In this course students will learn about tree growth, tree identification, harvesting methods, marketing tactics, pests, forest crop laws, careers, and conservation practices. Do you like to be outdoors in forests-then this is the class for you!

Semester Gr. 11-12 Prerequisite: none

Agricultural Mechanics-Tractor Restoration – While disassembling and rebuilding a 50-60 horsepower tractor, students will learn how to read technical drawings and parts books. This hands-on course takes what is learned in the classroom for engine rebuild, part restoration, painting and detail work and puts it into practice. Students maintain record books each week as they work in every area of a tractor auxiliary, electrical, hydraulics, power train and more. Limited to 12 students.

Gr. 11-12 Semester Prerequisite: Instructor Consent (must complete

application form)

Farm Management – Students will help run and maintain the school barn. Daily tasks include handling, grooming, feeding, and cleaning animal pens.

Gr. 12 Semester Prerequisite: Application

Independent Agriculture – Students who are interested in learning about a facet of agriculture that has been previously covered in a class or maybe has not been covered in a class-this course is for you! Students will work independently to set up rigorous, high-paced curriculum that focuses specifically on each student's interests.

Gr. 12 Semester Prerequisite: Instructor Consent

ART

Upperclassman may select a <u>maximum of 4</u> art classes per year with the exception of Yearbook. Placement in these classes may be limited due to class enrollment.

<u>Art Exploration</u> – includes the study and application of art elements and principles of design. Beginning Art students will learn the history, vocabulary and techniques related to art and design in both two-dimensional and three-dimensional projects. Units include: drawing, painting, sculpture, metals and ceramics. Lab fee - \$6.00

Gr. 9-12 Semester Prerequisite: none

<u>Drawing I</u> – is an introduction to the fundamental concepts and techniques of drawing using a variety of media and subject matter. Drawing focuses on black and white or monochromatic rendering from life, pictures, masterworks and imagination. With an emphasis on studio production, this course is designed to develop knowledge and skill in drawing, art criticism, art history, and aesthetics. Lab fee - \$6.00 Gr. 9-12 Semester Prerequisite: none

<u>Film and Video I</u> – In this class, students learn how to appreciate and view fine films from a variety of historical eras, studying the history of cinema through class discussion and writing movie reviews. Hands-on learning includes how to use a camera, shoot footage, write scripts, do production design, and learn how to edit film in post-production with the iMovie program. Lab fee - \$6.00

Gr. 9-12 Semester Prerequisite: none

<u>Hands on Art – Art for the Non-Artist</u> – Want to take an art class, but feel like you don't have the skills or creativity to be in an art class? Walk through the history of our world via art! One-week projects involve learning about a specific time in art history and then using tools and materials to create a small piece of artwork graded on effort and technique. Projects include: carving, sculpting, painting, photography, and drawing.

Gr. 9-12 Semester Prerequisite: none

<u>Photography I</u> – This course centers around using Canon DSLR cameras and multiple lenses to learn classic photography techniques as well as how to create a great photo. Projects include shutter speed, taking studio portraits with professional lights, photojournalism, and food photography all while critiquing their work in a group setting. Field trips and taking the camera home are optional. Lab fee: \$6.00 or purchase an SD card.

Gr. 9-12 Semester Prerequisite: none

<u>Film and Video II</u> – Advanced film students follow Film & Video I curriculum, but choose their own films to watch and critique as well as work independently on their own film-making and designing. This course focuses more heavily on the filming and cinematography of making movies as well as editing and the final processing of student-created films. Lab fee - \$6.00

Gr. 10-12 Semester Prerequisite: Film & Video

<u>Photography II</u> – Advanced photo students work more independently with a variety of projects that push creativity and productivity. Darkroom photos and chemical processing, studying famous photographers and their work, creating a series of photos that represent the human senses, and working in black and white are among a few of the projects included in this course. Lab fee: \$6.00 or purchase an SD card.

Gr. 10-12 Semester Prerequisite: Photography I

<u>Drawing II</u> – is a study of visual art and intermediate drawing skills. Students will explore different avenues of visual communication, self-expression, and creative problem solving through the creation of representative observational drawing as well as abstraction. Students will continue to develop technical drawing skill with an emphasis on composition and content. More time will be devoted to thematic development and the exploration of personal sources of meaning during the second half of the semester. Lab fee: \$6.00

Gr. 10-12 Semester Prerequisite: Drawing I

Metals & Glass I – Intermediate art students will be introduced to the tools, techniques, and methods used to create works of art in both metal and glass. Students will study historical and cultural uses of jewelry and glass. Units include: stained glass, glass etching, mosaic, copper enameling, wax casting, and metal fabrication. Lab fee - \$6.00

Gr. 10-12 Semester Prerequisite: Art Exploration

<u>Pottery & Sculpture I</u> – Advanced art students will create three-dimensional art forms through the study of art and design, various cultures and artifacts related to ceramics and sculpture. Units include: hand built pottery, wheel thrown pottery, glazing techniques, additive and subtractive sculpture, metal tooling, and found object sculptures. Lab fee - \$6.00

Gr. 10-12 Semester Prerequisite: Art Exploration

<u>Yearbook</u> – Develop skills in journalism and publishing. Students are responsible for producing the Raider, our full color school yearbook. They gain hands-on experience in planning and designing publications, digital photography, image editing, writing and editing copy, and on-line layout of our book. Students who take yearbook more than once assume leadership roles on the staff. (10th grade with Instructor Consent)

Gr. 11-12 All Year Prerequisite: Photography I

Metals and Glass II — is a continuation of what the students learned in Metals and Glass I using more advanced tools, techniques, and methods used to create works of art in both metal and glass. Students will study historical and cultural uses of jewelry and glass. Units of study will include: stained glass, glass etching, mosaic, wax casting, and metal fabrication. Lab fee - \$6.00

Gr. 11-12 Semester Prerequisite: Metals & Glass I

<u>Painting I</u> – An introduction to basic painting techniques and color principles applied to the exploration of tempera watercolor, acrylic and oil painting. We will study master artists and various painting styles. Lab fee: \$6.00

Gr. 11-12 Semester Prerequisite: Art Exploration or Drawing

<u>Painting II</u> – This course continues building aesthetic and technical skill in watercolor, acrylic, and oil with an introduction to air brush painting. Painters will use advanced design techniques to develop their own personal style in painting. Students will study an art movement form the viewpoint as an artist, art critic and art historian. Lab fee: \$6.00

Gr. 11-12 Semester Prerequisite: Painting I

<u>Pottery & Sculpture II</u> – is a continued exploration of hand building, wheel throwing techniques and advanced sculptural processes. Students will apply advanced techniques and skills to produce high quality three-dimensional forms to communicate ideas. Units include: mold making, hand built and wheel thrown pottery, and sculptural forms created by plaster, wire, metal and found objects. Lab fee - \$6.00

Gr. 11-12 Semester Prerequisite: Pottery & Sculpture I

Advanced Placement Studio Art — is designed for highly motivated students who are seriously interested in the study of art. This course is formatted following the Advanced Placement guidelines allowing students to have the option of submitting their portfolio for AP college credit at the end of school year in either **2-D, 3-D or Drawing**. Students who take this year long course will develop many skills necessary for future art endeavors. Lab fee - \$10.00. This course may offer transcripted/dual credit through Northcentral Technical College. (Refer to Special Programming Options on Page 37 for more information.)

Gr. 11-12 All Year Prerequisite: Successful completion of 2 or more art

courses and instructor consent

<u>Independent Study Art</u> – is open to seniors with a strong interest in a specific area of art. Lab fee -\$6.00.

Gr. 12 Semester Prerequisite: Successful completion of 2 or more art

courses and instructor consent

<u>Teacher Assistant Art</u> – is open to seniors who will work as a teacher's assistant with students in an art class and aid with the general maintenance of the art classroom.

Gr. 12 Semester Prerequisite: Successful completion of 2 or more art

courses and instructor consent

BUSINESS & INFORMATION TECHNOLOGY

REQUIRED COURSES:

GRADE 12

Financial Literacy **OR** Honors Financial Literacy

<u>Financial Literacy</u> – starts students on the path of becoming a competent consumer. This course provides an excellent foundation for buying cars, homes, insurance, clothes, food, etc. and teaches how to manage a checking account, credit cards, a budget, and investing. You will learn about scarcity, impacts of decisions, consumer rights, laws, and responsibilities. Students will accumulate resources and information for future reference. Websites, current periodicals, textbook, and other resources are used.

Gr. 12 Semester Prerequisite: none

<u>Honors Financial Literacy</u> – is a practical study of consumer problems and consumer choice. Selected topics include: budgeting and family resource management, sources of consumer information, help in solving consumer problems, government taxing and spending, and consumer decision making in such areas as transportation, insurance, financial institutions, consumer goods and services, housing, and credit. This course may offer transcripted/dual credit through Northcentral Technical College. (Refer to Special Programming Options on Page 38 for more information.)

Gr. 12 Semester Prerequisite: none

BUSINESS/MARKETING ELECTIVE COURSES:

<u>Business Exploration</u> – provides a foundation for understanding business. This course studies forms of business, economics (supply/demand curves; inelastic demand; shifts in demand/supply; Law of Diminishing Returns; circular flow of money; money supply and other concepts), international trade, business careers, current events and more. Students will create a partial business plan for a business of their choice. This course may offer transcripted/dual credit through Northcentral Technical College. (Refer to Special Programming Options on Page 38 for more information.)

Gr. 9-12 Semester Prerequisite: none

<u>Entrepreneurship</u> – Do you wonder what it would be like to own your own business? Explore business ownership and management through this class as well as learning hands-on through our school store, The Red Zone. You will learn about famous entrepreneurs throughout history, how they started their business and what made them so successful. You will also learn to solve business problems and determine the needs and wants of your customer while tailoring your business to them. This is a great course for everyone to take!

Gr. 9-12 Semester Prerequisite: none

<u>Intro to Marketing</u> – Through this course you will learn the fundamentals of marketing through creative group projects and hands-on learning experiences through our school store, The Red Zone. Explore marketing strategies including (but not limited to) new product development, marketing research, selling, promotional strategies, advertising and branding. This course is beneficial for all and concepts can be applied to everyone and every career.

Gr. 9-12 Semester Prerequisite: none

<u>Sports and Entertainment Marketing</u> – Explore marketing concepts through the sports and entertainment industry. Create your own sports team and stadium by learning marketing concepts and applying them to your own sports franchise. You will also explore topics including sports careers, promotions, branding, licensing, market research, product development and pricing. Students will gain hands-on experience throughout school store, The Red Zone.

Gr. 9-12 Semester Prerequisite: none

Social Media Marketing —Explore Social Media Marketing and Digital Marketing to create a deeper level of understanding of the world of Marketing. Topics included will be social media tools, such as Instagram, Facebook, Twitter, and SnapChat (along with many more), and how they're being used effectively to market products and brands. Marketing students will gain hands-on learning experiences through our school store, The Red Zone. This course may offer transcripted/dual credit through Northcentral Technical College for Grades 11-12. (Refer to Special Programming Options on Page 38 for more information.)

Gr. 10-12 Semester Prerequisite: Intro to Marketing, Sports and Entertainment Marketing **OR** Instructor Consent

Accounting I – Learn to record business transactions using the double-entry accounting system. Students will be following the 9 step accounting cycle to record business transactions using the double-entry accounting system along with GAAP (Generally Accepted Accounting Principles). Students will cover recording entries in the General Journal, posting to the General Ledger, creating financial statements, using computer accounting software and more for a service business.

Gr. 10-12 Semester Prerequisite: none

<u>Accounting II</u> – Continue to learn more accounting principles which include using special journals, adjusting entries, selling stock, inventory control, and more with merchandising business. Students will also experience these skills using accounting software.

Gr. 10-12 Semester Prerequisite: Accounting I

<u>Accounting III</u> – Explore the world of Corporation Accounting which includes topics such as: Notes Receivable, Notes Payable, Short-term investments, Long-term Liabilities, and more. This class will meet part of the NTC Dual Credit requirement for NTC's Accounting I class.

Gr. 11-12 Semester Prerequisite: Accounting II

<u>Quickbooks</u> – Introduces basic accounting concepts, set up and management of Quickbooks company files. The learner will navigate through the software by setting up users, entering beginning balances, and creating non-inventory items. Introduces customers and vendors by entering and paying bills, writing checks, creating invoices and sales receipts. Demonstrates achievement by producing reports and graphs.

Gr. 10-12 Semester Prerequisite: Accounting II

<u>Accounting IV</u> – Continue to explore the world of Corporate Accounting by looking at topics such as: Cash Flows, Bonds, Managerial Accounting, and more. This course may offer transcripted/dual credit through Northcentral Technical College. (Refer to Special Programming Options on Page 38 for more information.)

Gr. 11-12 Semester Prerequisite: Accounting III

<u>Street Law</u> – covers constitutional, criminal, civil and contract law as it affects everyday life. Explore criteria for different types of crimes. Explore how laws are interpreted, as well as the effects of the Amendments 1-6 of the U.S. Constitution.

Gr. 11-12 Semester Prerequisite: none

<u>Independent Study Store Manager</u> – Students will work with daily operations of The Red Zone and the concession stand. Duties may include creating promotions, managing social media, creating layouts, managerial duties, stocking, inventory, ordering new inventory, and other store/concessions related activities.

Gr. 12 Semester or year Prerequisite: Instructor Consent

INFORMATION TECHNOLOGY ELECTIVE COURSES:

<u>App Development and Design</u> – Create a new app, website, or product to solve a problem of your choice. Students will experience topics like app development and 3-D printing, and how to create a product that maximize the user experience. This course may offer transcripted/dual credit through Northcentral Technical College. (Refer to Special Programming Options on Page 38 for more information.)

Gr. 9-12 Semester Prerequisite: Digital Web Tools or Exp Web Design/

Programming

<u>Digital Web Tools</u> – Create and edit photos and videos using online tools, learn about social media tools, edit interactive presentations, and be introduced to animation and web pages. The knowledge and skills acquired in this class will enable students to successfully perform and interact in today's technology-driven society.

Gr. 9-12 Semester Prerequisite: none

<u>Exploring Computers & Basic Web Design</u> – Dive into the World of Computing and Technology. Explore evolution of computers as well as computer and IT related careers. Topics include, the history and evolution of computers, computer hardware and software, internet and networking, binary and hexadecimal language, introduction to HTML, and flow charting. Students will create/modify web pages using HTML tags and style the web pages with CSS.

Gr. 9-12 Semester Prerequisite: none

Intro to Gaming – Jump into the world of gaming with this course. This course is an introduction to gaming and animation including study of design, navigation, and graphics. Students will work with Alice, GameStar Mechanic, Scratch and other various programs to develop object-oriented programming skills. Students will also learn about gaming careers, what makes an effective game, and the responsibilities of becoming part of a game design team. This course is great for students with a personal interest in gaming and computer programming.

Gr. 9-12 Semester Prerequisite: none

<u>Web Design and Programming</u> – In this course students will learn how to add format to a webpage by writing CSS code. Continue to write computer programs using JavaScript. Students will also create flowcharts to outline the programs.

Gr. 11-12 Semester Prerequisite: Exploring Web Design & Prog or Inst. Consent

IT Essentials – provides an in-depth exposure to PC hardware and operating systems. Students study the functionality of hardware and software components as well as suggested best practice in maintenance and safety issues. Through hands-on activities and labs, students learn how to assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems. In addition, an introduction to networking is included. This course helps students prepare for the CompTIA's A+ certification. It will also provide a good background for students wishing to take the CISCO networking courses. This course may offer transcripted/dual credit through Northcentral Technical College. (Refer to Special Programming Options on Page 38 for more information.)

Gr. 10-12 Semester Prerequisite: none

DRIVERS EDUCATION

Driver Education Classroom and Behind-the-Wheel are optional programs for all students. The classroom portion is a nine week course and runs opposite of Life Management. As a convenience the Classroom and Behind-the-Wheel instructions will be offered to students during the school day for no credit. The entire cost of both programs is approximately \$400 and is the responsibility of the student and his/her parents/guardians. Students that choose not to enroll in driver's education will be given a study hall for this nine-week period. A frequent question for parents is about the age of their student and the minimum age a child can begin the classroom portion of driver's ed is 14.5. However, you can register for class before 14.5. Currently Crabmann's Driver Education LLC provides the instruction and can be reached at 715-218-3626 or at crabbmans.com.

ENGLISH

- ♦ While the content of each level is similar, the level of skill students practice during each course is different. These skills, such as reading and writing skills, increase in rigor.
- Placement is based on Standardized Test Scores and teacher recommendation.

REQUIRED COURSES:

GRADE 9

English 9

Honors English 9

This course is an accelerated and enhanced approach to effective written and oral communication. Students will focus on style, structure, and language appropriate for various purposes and audiences and will be actively involved in research methodology, writing, and speaking at advanced levels. As part of the course work, the student will review basic grammar usage, study vocabulary, read selected fiction and nonfiction texts, and utilize technology to develop multimedia products and presentations.

Gr. 9 All Year Prerequisite: none

GRADE 10

English 10

Honors English 10

Focuses on extending students' literary analysis skills by reading and reviewing a variety of world literature including novels, drama, nonfiction, poetry, and short stories. The composition work centers around reviewing conventions and grammar, studying vocabulary, and developing writing skills through essay writing and extended composition work.

Gr. 10 All Year Prerequisite: none

GRADE 11

Language and Composition 11

Honors Language and Composition 11

Advanced Placement Language and Composition 11

Engages students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects, as well as the way genre conventions and the resources of language contribute to effectiveness in writing. Taking the AP exam is optional. (Refer to Special Programming Options on Page 35 for more information.)

Gr. 11 All Year Prerequisite: none

GRADE 12

Literature and Composition 12

Honors Literature and Composition 12

Advanced Placement Literature and Composition 12

Engages students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style and themes, as well as such smaller-scale elements as the use of figurative language, imagery, symbolism and tone. Taking the AP exam is optional. (Refer to Special Programing Options on Page 37 for more information.)

Gr. 12 All Year Prerequisite: none

ELECTIVE COURSES:

<u>Drama I</u> – This course is an extension of the Drama Production each semester. While a production is ongoing, coursework consists of assisting with production elements and studying performance elements of the current production. When the production closes, coursework shifts to study and exploration of dramatic works and practice of acting technique. Coursework includes: reading texts, viewing performances, analyzing plot and character, studying theatre history, practicing acting exercises, and completing basic scenework.

Gr. 09-12 Semester Prerequisite: none

<u>Oral/Interpersonal Communication</u> – focuses on developing speaking, verbal and nonverbal communication, and listening skills through individual presentations, group activities, and other projects. Juniors and seniors pursuing any post-secondary degree are encouraged to enroll and learn to conquer the fear of public speaking. This semester long course is an elective and will not replace a required course. This course may offer transcripted/dual credit through Northcentral Technical College. (Refer to special programming options on Page 38 for more information.)

Gr. 11-12 Semester Prerequisite: none

<u>Written Communication</u> – develops writing skills which include prewriting, drafting, revising and editing. A variety of writing assignments are designed to help the student analyze audience and purpose, research and organize ideas and format and design documents based on subject matter and content. Also develops critical reading and thinking skills through the analysis of a variety of written documents. This semester long course is an elective and will not replace a required course. This course may offer transcripted/dual credit through Northcentral Technical College. (Refer to Special Programming options on Page 38 for more information.)

Gr. 11-12 Semester Prerequisite: none

FAMILY AND CONSUMER SCIENCES (FACS)

REQUIRED COURSE:

<u>Life Management</u> – is a required, quarter-long class that will help students acquire the life skills they will need to make informed decisions about the issues and personal choices they will face in an increasingly complex society. Topics include: making informal decisions; developing consumer skills; identifying personal goals, resources, and values; forming critical thinking skills; and investigating careers and job skills.

Gr. 9 One Quarter Prerequisite: none

ELECTIVE COURSES:

<u>Cake 'n Bake</u> – Pastries, bread and pies, oh my! This class will explore all things pastry related. Students will get the skills needed to make artisan breads, pastries, candies, cookies, cakes, decorating, and more. Students will explore careers in the area of culinary and pastries. Please note, that this class will work with many allergen foods and it will be impossible to accommodate for gluten, egg, and milk allergies.

Gr. 9-12 Semester Prerequisite: none

<u>Food Exploration</u> – This introductory course provides a foundation in basic cooking skills. There is a strong emphasis on nutrition and nutritious foods. Each food group will also be explored and students will learn the techniques for cooking fruits, vegetables, milk products, eggs, meats, and bread.

Gr. 9-12 Semester Prerequisite: none

<u>Fashion Engineering and Clothing Design</u> – Interested in the field of design and clothing construction? Explore the evolution of the fashion scene and popular designers. Learn the techniques necessary while working on a sewing machine and serger. Students of all levels will apply creativity and basic sewing to match their individual skill level. Students both male and female will make a variety of projects which may include: seasonal decorations, home accessories, boxer, pajama pants, comforters, hats, bags, etc. and an item to repair, redesign and recycle. **Students are required to bring in fabric for some projects.**Gr. 9-12 Semester Prerequisite: none

<u>Hobbies for Life</u> – Looking for something hands-on and fun? Students learn to use creativity and basic sewing and needle arts to make wearable art, home accessories and seasonal decorative items. Students will use the sewing machine, hand sewing techniques, and special materials to create a variety of projects, such as knitting, crocheting, stitchery, rug making, basketry, scrap booking, weaving, quilting, applique, and craft design. **Each student will provide supplies for one quarterly project, other project supplies are provided.**

Gr. 9-12 Semester Prerequisite: none

Sports Nutrition for High School Athletes – this class will provide lessons developed by professors at Oregon State University and other contemporary and relevant sources. Students will look at their dietary needs based on the sport/s in which they compete. It will have labs that focus on hydration, pre-exercise nutrition, fueling during a game, recovery foods, and how to choose well while eating out. It will tackle topics like the powders and potions that some students use to supplement their diet, and careers in the sports nutrition field. Could applying these topics help give you the competitive edge?

Gr. 9-12 Semester Prerequisite: none

<u>Culinary Arts</u> – Interested in a food related career? This course will offer advanced food preparation skills, such as: knife skills, garnishing, sauce making, egg preparation, etc. Students will be exposed to many different food related career units: food photography and advertising, catering, food science, pastry chef, candy making, product development, etc. Topics of focus include sanitation, hygiene, state codes and food safety. Students will take the National Restaurant Associations ServSafe Managers test. Passing this test will provide certification for student to work in any restaurant in the country for a 5-year period. This course may offer transcripted/dual credit through Northcentral Technical College. (Refer to Special Programming Options on Page 38 for more information.)

Gr. 10-12 Semester Prerequisite: Food Exploration **OR** Instructor's Consent

Interior Design – Whether you are interested in the field of interior design and/or architecture/construction as a career, or you are looking for practical knowledge to apply to future housing, this is the course for you. Emphasis is on housing styles and trends, construction, space planning, floor plans, furniture arrangement, background materials, painting techniques, landscaping, etc. Students male and female will enjoy hands-on creative opportunities using real industry samples, interactive computer design tools, industry specialist speakers, mini-field trips and career awareness. Gr. 10-12 Semester Prerequisite: none

<u>Food Science I & II</u> – See Science Department for course descriptions. Gr. 10-12 Semester Prerequisite: none

<u>Global Kitchen</u> – What is that good smell? A large portion of this class will take you on a culinary tour of the world. Students will learn about the people, cultures, celebrations, climate and food from Italy, Mexico, the Caribbean, Greece, Africa, China, India, etc. We will also learn about the food from across the US, whether it is Chicago style deep dish pizza or foods served at Mardi Gras or the taste of Hawaii; the US offers a wide variety of specialties.

Gr. 10-12 Semester Prerequisite: Food Exploration **OR** Instructor Consent

<u>Relationships</u> – is an interactive course designed to give both males and females realistic views of the responsibilities of the adult choices awaiting them. This course examines personal development and the relationships most important to young people in their future. Students will gain a broadened understanding of such topics as character, personality, friendship, dating, dating violence, engagement, wedding planning, marriage, parenthood, and family crisis issues. Popular media, current resources, hands-on projects, guest speakers and mini-field trips contribute to the value of the course.

Gr. 10-12 Semester Prerequisite: none

<u>Creative Cooking</u> – focuses on the six major nutrients (carbohydrates, proteins, fats, minerals, vitamins and water) and how each is used by the body. The planning of well-balanced diets and nutritional analysis of diets is emphasized. The class will be a combination of content and hands-on lab experiences. This class may offer transcripted/dual credit through Northcentral Technical College. (Refer to Special Programming Options on Page 38 for more information.)

Gr. 11-12 Semester Prerequisite: none

Infant & Toddler Development — is designed for students who love children and are concerned about their future and/or are interested in related careers. Study is on the development of the whole child from the prenatal stage through toddlerhood. Units include pregnancy, childbirth, brain development, the newborn, infant and toddler development, nutritious meals, toys and play activities, promoting health and safety, SIDS, shaken baby, and guidance techniques. Regular interaction with elementary students, many hands-on projects, current media, and observation at daycare centers, guest speakers and mini-field trips contribute to the value of the course. Completion of this course and *Foundations of Early Childhood Development* will enable a student to be employed as an Assistant Child Care Teacher in a day care center. This course may offer transcripted/dual credit through Northcentral Technical College. (Refer to Special Programming Options on Page 38 for more information.)

Gr. 11-12

Semester

Prerequisite: none

Foundations of Early Childhood Development – is designed for students who want further experience in the care of children. This course reviews infant and toddlers with an in-depth look at preschoolers. Study will also focus on child care settings and child-related careers. Students will be present with opportunities to teach young children by developing age appropriate learning activities. Other topics include: sensory experiences, art and music enrichment, storytelling, toys and play, nutritious food and snacks, guidance techniques, child theorists, multi-cultural/anti-bias and creative curriculum programs, and child safety regulations. Regular interaction with elementary students, many hands-on projects, current media, observation at daycare centers, guest speakers and mini-field trips contribute to the value of the course. Completion of this course and Infant and Toddler Development will enable a student to earn state certification and become eligible for employment as an Assistant Child Care Teacher (ACCT) in a daycare center. This course may offer transcripted/dual credit through Northcentral Technical College. (Refer to Special Programming Options on Page 38 for more information.)

Gr. 11-12 Semester Prerequisite: none

<u>Single Survival</u> – is a class designed for the seniors who are getting ready to move out on their own. Students will learn to prepare nutritious meals, shop wisely for groceries, select and furnish an apartment, maintain and purchase clothing, manage finances, and cope with the responsibilities of adulthood.

Gr. 12 Semester Prerequisite: none

MATHEMATICS

All University of Wisconsin Colleges currently require 3 years of math with a minimum of Algebra II to fulfill university entrance requirements. Since requirements vary for technical colleges, public and private colleges, students are encouraged to check for specific information in Student Services early in their high school careers.

Possible math tracks to graduation								
	Option 1	Option 2	Option 3.1	Option 3.2	Option 3.3	Option 4 (for 9th who took Algebra 1 8th)		
9th	Pre-Algebra	Algebra A	Algebra I	Algebra I	Algebra I	Geometry		
10th	Algebra A	Algebra B	Geometry	Geometry	Geometry	Algebra II		
11th	Algebra B	Geometry	Algebra II	Algebra II	Algebra II	Pre-Calculus		
12th	Geometry	Algebra II	Pre- Calculus	College Algebra	Math for the Trades	Calculus AB		

- All students must complete 3 consecutive years of Math as they begin high school and are encouraged to take a 4th year for career and college readiness
- Math for the Trades is a 4th year choice for seniors only
- College Algebra is a 4th year choice for seniors that earned a C or higher in Alg 2
- 4 year colleges prefer students to have successfully completed 3 years of math with success in Algebra 2 at minimum.
- Students wanting advanced math options may be allowed to take two math courses in one year with math department approval

Classroom graphing calculators are available, but students are welcome to purchase their own basic, scientific calculator. The provided graphing calculators are allowed to be used on the ACT, SAT, PLAN, PSAT/NMSQT.

Courses offered:

<u>Pre-Algebra</u> – This course emphasizes the ordering and comparison of whole numbers, integers, fractions, and decimals, along with their use in the four basic operations. Other operations such as absolute value, exponents, and square roots will be learned. The concept of the variable and solving/graphing linear equations is introduced. Students will also calculate various measurements and determine the basic properties of geometric figures.

Gr.9 All year Prerequisite: Placement determined by 8th grade teacher and test scores

<u>Algebra I</u> – This course includes the writing and graphing of linear equations, the study of the properties of the real number system, and the development of skills in solving equations, inequalities, and systems. Students explore polynomials, rational expressions, radicals, exponential relationships, and quadratic functions.

Gr.9 All year Prerequisite: Placement determined by grades and test scores

<u>Algebra A</u> – Students will continue in their study of expressions, equations, and radicals. This course focuses heavily on interpreting, graphing, and writing linear equations. Solving linear systems of equations and identifying equivalent expressions is also emphasized.

Gr.9-10 All year Prerequisite: Pre-Algebra OR 8th grade teacher

Placement and test scores

<u>Algebra B</u> – will begin with a review of the topics covered in Algebra A. Students will study linear systems of equations and inequalities, exponential relationships, quadratic equations, polynomials and factoring, rational equations, and radicals.

Gr.10-11 All year Prerequisite: Algebra A

<u>Geometry</u> – This course is designed to build and strengthen spatial awareness and reasoning. Algebra is used to solve problems involving angles and shapes that are tied back to real world applications. New tools such as the Pythagorean Theorem and trigonometry will be used to find side lengths and angles to triangles, and ultimately the area and perimeter of regular polygons. Additionally, students will develop reasoning skills to develop proofs about triangles and composite shapes. This class will also spend time focusing on probability and statistics within a simple set.

Gr.9-12 All year Prerequisite: Algebra 1 or Algebra A and B

<u>Algebra II</u> – this course is a more advanced study of algebra including quadratic systems and functions and introduction to trigonometry. This course develops a systematic approach to solving problems and will prepare the student for more advanced mathematics. It should be taken if you are planning to continue into Pre-Calculus and/or College Algebra. This course may offer transcripted/dual credit through Northcentral Technical College. (Refer to Special Programming Options on Page 38 for more information)

Gr.10-12 All year Prerequisite: Geometry

<u>Pre-Calculus</u> – is an in-depth study of functions, including the functions of trigonometry and analytic geometry. Students who complete this course will be prepared to take a calculus course or any other fifth year advanced mathematics course. Calculator based graphing technology is incorporated.

Gr.11-12 All year Prerequisite: Algebra II

<u>College Algebra with Applications</u> – will cover those skills needed for success in many areas of postsecondary education. Topics include the real and complex number systems, polynomials, exponents, radicals, solving equations and inequalities (linear and nonlinear), relations and functions, systems of equations and inequalities (linear and nonlinear), matrices, graphing, conic sections, sequences and series, combinations, and the binomial theorem. This class is rigorous and will prepare you for your college placement exams. It is also transcripted/dual credit through Northcentral Technical College and accepted at all 4-year UW colleges. (Refer to Special Programming Options on Page 38 for more information.)

Gr.12 All year Prerequisite: C or higher in Algebra II

Advanced Placement Calculus AB – is a college level calculus course based on the recommendations of the Advanced Placement Program Mathematics Committee. Taking the AP exam is optional. This course may offer transcripted/dual credit through Northcentral Technical College. (Refer to Special Programming Options on Page 37 for more information.)

Gr.11*-12 All year Prerequisite: Pre-Calculus

Advanced Placement Calculus BC – is a college level calculus course that follows Calculus AB, based on the recommendations of the Advanced Placement Program Mathematics Committee. Taking the AP exam is optional. (Refer to Special Programming Options on Page 37 for more information.)

Gr.12 All year Prerequisite: AP Calculus AB

<u>Math for the Trades</u> – is a review and application of basic arithmetic skills involving whole numbers, fractions and decimals. Introduction and application of percentages, area, volume, ratios and proportions will also be covered. The measurement system, angle, perimeter, square and board feet and formulas for geometric shapes as well as algebra will be taught. This course may offer transcripted/dual credit through Northcentral Technical College. (Refer to Special Programming Options on Page 36 for more information.)

Gr.12 All year Prerequisite: none

MUSIC

Band – is comprised of two concert ensembles: Concert Band and Symphonic Band. (These bands combined make up the marching band.) Members are required to attend all performances and all scheduled lessons. Placement in any band is determined through an audition held in the spring.

Gr. 9-12 All Year Prerequisite: Minimum of 2 years band experience on either a woodwind, brass or percussion instrument

<u>Auditioned Choirs</u> – are comprised of the following concert groups: **Momentum Show Choir (grades 9-12)** and **Concert Choir (grades 9-12)**. Placement in these choirs is determined through an audition held in the spring of each year. However, placement into the auditioned choirs is not guaranteed. Members are required to attend all performances and all scheduled lessons.

Gr. 9-12 All Year Prerequisite: Audition

<u>Cambiata Choir</u> – is open to all students in grades 9-12. This choir will fulfill the fine arts requirement as well as prepare students for the auditioned choirs. Members are required to attend all performances and all scheduled lessons.

Gr. 9-12 All Year Prerequisite: none

<u>NEW!! Choreography Class</u> — Open to all current show choir students who will be in next year's troupe. This class will consist of our current dance captains and our possible dance captains for the following year. In this class you will work with Momentum in cleaning and perfecting our show for our competition season and help choreograph and prepare for Red White Spotlight. Grading will be based on weekly journaling, project completion, and overall participation within the groups.

Gr. 10-12 All Year Prerequisite: Momentum Show Choir & Teacher Consent

<u>Music History & Literature</u> – This course is designed for, but not limited to, students who plan on music as a major field of study at the college level. This course deals with the styles of performance and literature from medieval through the present. Must be enrolled in either band or choir concurrently.

Gr. 11-12 Semester Prerequisite: Instructor Consent

<u>Music Theory</u> – This course is designed for, but not limited to, students who are interested in a career in a music profession. Students will study: note identification, rhythm identification, major scales, minor scales, chords, chord progressions, composition, and chorale analysis. Must be enrolled in band or choir concurrently.

Gr. 11-12 Semester Prerequisite: Instructor Consent

PHYSICAL EDUCATION & HEALTH

REQUIRED COURSES:

<u>Health</u> – This course includes topics such as the human body structure and function, CPR, mental/emotional health and disorders, suicide prevention, chemical use/abuse, tobacco use, diseases, and human growth and development.

Gr. 10 Semester Prerequisite: none

<u>Phy Ed 9/10</u> – This is a required class that develops a basic understanding of the rules, skills, and strategies used in a wide range of physical activities. A variety of fitness concepts will be taught, including, but not limited to 5 components of fitness, target heart rate, FITT principle, SMART goals, etc. Through this course, students will learn the WHY and HOW a particular physical activity affects their bodies and their personal health. This course is also designed to promote a positive attitude towards physical activity and good sportsmanship by working with others. **Possible units may include** fitness testing, cardio and strength fitness (2 times per week), swimming (stroke refinement), biking, archery, and indoor/outdoor individual and team sports.

Gr. 9-10 Semester Prerequisite: none

ELECTIVE COURSES:

Strength and Conditioning – is geared towards ANY self-motivated individual who would like to improve their personal strength and conditioning and/or performance in a sport by focusing on the following areas of sports training and competition: cardio and strength training, speed, agility, flexibility, and plyometrics, and general conditioning activities. Student-athletes are highly encouraged to take this class. Students are expected to and WILL participate in weight training 2-4 times per week for the entire semester. The number of strength workouts per week will be based on their personal goals or if they are in or out of a current sports season.

Gr. 10-12 Semester Prerequisite: Phy. Ed 9/10

<u>Recreational Sports</u> – this is a competitive class which may include, but not limited to the following activities: cardio and strength fitness, yard games (bocce ball, bean bags), gym games (versions of volleyball, basketball, badminton, pickleball, floor hockey, omnikin, tchoukball, sabbaki ball), snowshoeing, biking, water games, golf, disc golf, spike ball, soccer, softball, gatorball, tennis and bowling (approximate fee of \$40).

Gr. 11-12 Semester Prerequisite: Phy. Ed 9/10

<u>Unified/Adaptive Phy Ed</u> – this course combines students of all abilities to participate in developmentally appropriate activities including lifetime activities, physical fitness, and sports. Students will work together to increase competence and confidence in a variety of physical activities. Through ongoing leadership opportunities, members of this course will be empowered to help create a more inclusive and accepting school environment for all students. Expected learning outcomes include increasing physical fitness, improving activity-specific skills, cooperating and working together with classmates, learning how to make better health & lifestyle choices, and understanding each other's differences.

Gr. 11-12 Semester Prerequisite: Phy. Ed 9/10/APE/IEP

<u>Low-Impact PE</u> – this is a Physical Education class developed to explore a variety of lifetime activities and sports at a more scaled down pace. This is for the student who wants to learn how to stay healthy and active but does not do well in high-intensity situations. Activities will include, but are not limited to: Lacrosse, archery, ice skating, swimming, soccer, Tchoukball, cardio and strength training activities, fitness walks, volleyball, frisbee, golf, tennis, spikeball, pickleball, badminton, floor hockey, bean bags, croquet.

Gr. 11-12 Semester Prerequisite: Phy. Ed 9/10

<u>Just Boys</u> – is designed for any junior or senior boy and may include, but not limited to the following activities: cardio and strength fitness, flag football, Outdoor Invasion Games (flag football, soccer, ultimate frisbee, broomball, lacrosse, and gatorball), spike ball, Indoor Sports (basketball, volleyball, badminton, pickleball, team handball, floor hockey, and sabaki ball).

Gr. 11-12 Semester Prerequisite: Phy. Ed 9/10

<u>Just Girls</u> – is designed for any junior or senior girl and may include the following activities: cardio and strength fitness, tennis, lacrosse, sabaki ball, scooter soccer, gatorball, disc golf, volleyball, badminton, eclipse ball, kettlebells and personalized physical activities (power walking, Zumba, Pound, self-defense, aerobics/pilates/bosu), water fitness/aerobics, broomball, ice skating and snowshoeing.

Gr. 11-12 Semester Prerequisite: Phy. Ed 9/10

PRE-ENGINEERING

What Is Project Lead the Way (PLTW)?

The PLTW Pathway to Engineering (PTE) program is a sequences of courses, which follows a proven hands-on, real-world problem-solving approach to learning. Throughout PTE, students learn and apply the design process, acquire strong teamwork and communication proficiency and develop organizational, critical-thinking, and problem-solving skills. They discover the answers to questions like how things are made and what processes go into creating products? Students use the same industry-leading 3D design software used by companies like Intel, Lockheed Martin and Pixar. Students apply biological and engineering concepts related to biomechanics – think robotics. They design, test and construct devices while working collaboratively on a culminating capstone project. It's STEM education and it's at the heart of today's high-tech, high-skilled global economy.

Pathway to Engineering – MASH Engineering Program

- IED Introduction to Engineering Design
- CEA Civil Engineering and Architecture
- ES Bioengineering
- POE Principles of Engineering
- EDD Engineering Design and Development

How Does a Student Become Eligible for College Credit?

Any student from a PLTW-certified school who has met the requirements set by the universities is eligible for college-level credit. See Mr. Swedlund or Mr. Gasser for more information.

Courses offered:

<u>IED (Introduction to Engineering Design)</u> – Students will use Autodesk Inventor 3d modeling software and 3d printers to design and build solutions to problems. This course is valuable for someone looking into the fields of construction, woodworking, mechanics, machining, and welding. This class is a must for anyone looking into a career in all fields of engineering or packaging.

Gr. 9-12 All Year Prerequisite: none

<u>CEA (Civil Engineering and Architecture)</u> - Students will use Autodesk Revit architecture software to design floor plans and 3d models of houses, buildings, and building lots. They will also be introduced to surveying, building codes, site development, plumbing, electrical, rainwater calculations, building structures, and materials of construction. This course is valuable for someone looking into the fields of building construction, road construction, architecture, civil engineering, or interested in learning about houses and designing them.

Gr. 10-12 All Year Prerequisite: Geometry (can be taking it while in the class)

<u>ES (Bioengineering)</u> - Students investigate and design solutions for real world challenges related to (1) genetic engineering and food security, (2) renewable energy, and (3) safe drinkable water. The environmental sustainability bioengineering course develops students' thinking skills and prepares them for emerging careers such as Genetic Engineering, Biomedical Engineering, Bioengineering, Chemical Engineering and Environmental Engineering. Applying their knowledge through hands-on activities and simulations, students research and design potential global solutions to real world challenges.

Gr. 10-12 All Year Prerequisite: Biology (may be taken concurrently)

<u>POE (Principle of Engineering)</u> - This is a hands on lab style course where students will be building and programming robots to perform specific tasks. They will also be learning about and performing labs on heat transfer, simple machine calculations, electricity, beam load transfers along with exploring all the different fields in engineering. This class is a must for anyone looking into a career in engineering. It is also valuable for fields of electromechanical technology, machining, and automation fields.

Gr. 10-12

All Year

Prerequisite: Geometry (can be taking it while in the class)

<u>EDD</u> (Engineering Design and Development) - This is the capstone course for PLTW where students work in teams to solve problems of their own choosing. Under the guidance of a community mentor, teams employ all the skills and knowledge gained through previous coursework to brainstorm, research, construct and test a model in real-life situations (or simulations); document their designs; and present and defend the designs to a panel of experts.

Gr. 12

All Year

Prerequisite: IED, CEA, ES or POE

SCIENCE

All University of Wisconsin colleges currently require 3 years of science to fulfill university entrance requirements. Since requirements vary for technical colleges, public or private colleges, students are encouraged to check for specific information in Student Services early in their high school careers.

- While the content of each level is similar, the level of skill students practice during each course is different. These skills, such as reading and writing skills, increase in rigor.
- Placement is based on standardized test scores and teacher recommendation.

REQUIRED COURSES:

GRADE 9

Applied Physical Science

Physical Science

Honors Physical Science

First semester consists of basic physics, including energy, electricity, magnetism, machines, and Newton's 3 Laws. Second semester will include basic chemistry, including the atomic model, matter, periodic table, and chemical equations along with units on earth and space science. Throughout the course, problem solving and scientific investigation skills will be stressed.

Gr. 9 All Year Prerequisite: none

GRADE 10

Applied Biology

Biology

Honors Biology

Investigates the living world and how it affects our lives. The course content includes: ecology, cells, cell energies, heredity, genetics, classification, evolution, diversity of organisms and structure, and function of plants and animals. The student discovers and learns to appreciate the interrelationships of the various forms of life. Lab activities form the nucleus of this course.

Gr. 10

All Year

Prerequisite: Physical Science

GRADE 11

Applied Chemistry Chemistry Honors Chemistry

<u>The Applied Chemistry</u> curriculum was designed to make chemistry applicable to everyday life. Students will gain a better understanding of common substances and their behavior. Content covered will include: measurements, matter and its interactions, basic atomic structure and theory, and chemical reactions. This course will focus on real world applications. This course is for students who are not planning to pursue a four-year college degree.

<u>Chemistry</u> is the study of matter, its properties, and its interactions. Students in this course will work in the chemistry laboratory, solve problems mathematically, and learn concepts that will prepare them for an introductory college chemistry course. There will also be an emphasis on skills such as interpretation of data, understanding scientific investigations, and evaluating scientific models.

Gr. 11 All Year Prerequisite: Physical Science

ELECTIVE COURSES:

<u>Earth and Space Science</u> – This course deals with selected topics in earth and space science. Earth science topics to be covered may include: minerals and rocks, plate tectonics, earth's geologic history, weather and climate, and mapping. Space science topics may include: origin of the universe, the electromagnetic spectrum, star evolution, planets, gravitation, and the history of astronomy.

Gr. 9-12

Semester

Prerequisite: "C" or better in Algebra I

<u>Food Science I</u> – Why if you are blind folded does food taste different? How do they get those swirls of fudge in ice cream? Is there really bacteria in yogurt? Food science will answer those questions and more. Food science is the study of food, how it is made and packaged. In this science equivalent course, you use everyday food practices to more easily explain the basic fundamental science concepts. We will also learn how businesses and career professionals use food science in the real world. Ready to think like a scientist? This class is for you.

Gr. 10-12 Semester Prerequisite: none

<u>Food Science II</u> – Why are some cookies chewy and some crunchy? How do they make bacon bits without using bacon? Why is the world a phytochemical and why would you want to eat one? Love jerky? Discover the science behind dehydration. Wisconsin is the dairy state; do you know how cheese is made? Food Science II, a science equivalent course, will use chemistry and biology to explore the components of food like water, sugar, complex carbohydrates, lipids, proteins, enzymes, micronutrients, and photo chemicals. Students will use principles of science to create and package a new food product. The planning of well-balanced diets and nutritional analysis will be emphasized.

Gr. 10-12 Semester Prerequisite: none

Advanced Placement Biology – is a course that covers in greater scope the concepts, knowledge, and skills introduced in Biology at MASH. This course is designed to offer students topics that are covered in a freshman biology course at the university level. Greater amounts of time and effort are expected on the part of the student. Reading requirements for the course are rigorous and require a daily commitment in order to stay engaged in the class. Laboratory activities suggested by the College Board are conducted to give the student a fair representation of a university-level biology course. In addition to the College Board laboratories, additional activities/labs will supplement the different units effectively. Taking the AP exam is optional. (Refer to Special Programming Options on Page 37 for more information.)

Gr. 11-12 All Year

Prerequisite: minimum GPA of 3.0 in Biology; and Chemistry (may be taken concurrently)

<u>Human Anatomy & Physiology</u> – is the basic study of the anatomy and physiology of the human body systems. Laboratory activities form the nucleus of this course. (A fetal pig will be used as a dissection specimen.) Geared to college/technical college bound students.

Gr. 11-12

Semester

Prerequisite: "C" or better in Biology is recommended

<u>Honors Physics</u> – physics is the study of motion, forces, and energy. Students in this course will examine these topics in the context of Mechanics, which includes simple motion, forces, collisions, and torque. The course will include significant amounts of mathematical problem solving, along with technology-based laboratory investigations.

Gr 11-12 All Year Prerequisite: "C" or better in Algebra II

Medical Terminology — is designed for students interested in the medical field. Using the word-building system, this course teaches students to pronounce, define, build, spell and analyze medical terms. This course is based on the anatomy and physiology of the human body's system. Medical Terminology will be taught as a Hybrid class using the online assessment site called Canvas through Northcentral Technical College. All assessments will be taken online. Assignments and activities will also be completed online. This course may offer transcripted/dual credit through Northcentral Technical College. (Refer to Special Programming Options on Page 38 for more information.)

Gr. 11-12 Semester Prerequisite: "C" or better in Biology is recommended

Advanced Placement Chemistry – is a course that covers in greater scope the concepts, knowledge, and skills introduced in Chemistry at MASH. This course is designed to offer topics that are covered in a freshman chemistry course at the university level. Greater amounts of time and effort are expected on the part of the student. Reading requirements for the course are rigorous and require a daily commitment in order to stay engaged in the class. Laboratory activities suggested by the College Board are conducted to give the student a fair representation of a university-level chemistry course, along with additional activities/labs. Taking the AP exam is optional. (Refer to Special Programming Options on Page 37 for more information.)

Gr. 12 All Year

Prerequisite: minimum GPA of 3.0 in Chemistry; and Algebra II (may be taken concurrently) or Teacher Recommendation

SOCIAL STUDIES

- While the content of each level is similar, the level of skill students practice during each course is different. These skills, such as reading and writing skills, increase in rigor.
- Placement is based on Standardized Test Scores and teacher recommendation.

REQUIRED COURSES:

GRADE 9

Human Geography

Advanced Placement Human Geography

Introduces students to how we organize space and society and how we make sense of others and ourselves in our localities, regions, and the world. Students employ spatial concepts and landscape analysis to examine human social organization and its environmental consequences. They also learn about the methods and tools geographer use in their science and practice. In addition, students will think about and interpret maps. They will understand the association among phenomena in different places. Students will also interpret the relationships among patterns and processes as it relates to different areas. Finally, they will define regions and characterize and analyze the changing relationships between place. Taking the AP exam is optional. (Refer to Special Programming Options on Page 37 for more information.)

Gr. 9 All Year Prerequisite: none

GRADE 10

US Government and Politics

Advanced Placement US Government and Politics

Will give students a logical viewpoint on government and politics in the United States. This course includes both the study of general concepts used to interpret U.S. government and politics and the analysis of specific examples to highlight those concepts. It also requires familiarity with the various documents, institutions, groups, beliefs and ideas that comprise U.S. government and politics. Students will become familiar with the variety of viewpoints and explanations for various behaviors and outcomes amongst citizens and the government that represents them. Taking the AP exam is optional. (Refer to Special Programming Options on Page 37 for more information.)

Gr. 10 All Year Prerequisite: none

GRADE 11

United States History

Advanced Placement United States History

Chronologically examines the history of the United States, beginning with Pre-Columbian Societies and early inhabitants of the Americans and culminating with present-day American issues. Themes within the course curriculum include American Diversity, American Identity, American Culture, Demographic Changes, Economic Transformations, Environment, Globalization, Politics and Citizenship, Reform, Religion, Slavery and its Legacies, and War and Diplomacy. Students will be introduced to a wide range of primary and secondary source materials as a means of investigation, analysis, understanding of the United States History. Taking the AP exam is optional. (Refer to Special Programming Options on Page 37 for more information.)

Gr. 11 All Year Prerequisite: none

ELECTIVE COURSES:

Ancient Civilizations – Projecting the future of humanity is best done by studying those who came before us. Take a step outside of your comfort zone and delve into a world outside of your own as we examine the world's most prominent ancient civilizations. We will start our journey by taking a trip back in time as we explore the fertile crescent and the rise and fall of the Egyptian Empire. Next, we will cross the Mediterranean to inspect the infamous city-state of Sparta. Fast forward 900 years to the formation and collapse of the Roman Empire. Visit the Mongolian steppe which would be the birthplace to the world's largest ancient empire. Finally, traverse across the Atlantic Ocean and discover the Aztec empire.

Gr. 9-10 Semester Prerequisite: none

<u>U.S. Military History</u> – focuses on the international affairs of the United States during the 18th, 19th, and 20th Centuries. Through the study of American's Wars, including the American Revolution, the American Civil War, World War I, World War II, Korea and Vietnam, this course will analyze the social political, and international impact of these wars on the United States.

Gr. 11-12 Semester Prerequisite: none

<u>Intro to Sociology</u> – is devoted to the study of the structure of social life; the way groups are put together, and the way they function. It will also explore the three major philosophical views pertaining to the study of society, the Conservative, Social Democrat and Libertarian points of view.

Gr. 11-12 Semester Prerequisite: none

<u>Intro to Psychology</u> – is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students will also learn about the ethics and methods psychologists use in their science and practice.

Gr. 11-12 Semester Prerequisite: none

<u>Abnormal Psychology</u> – is designed to explore historical views and current perspectives of abnormal behavior. Abnormal Psychology will emphasize major diagnostic categories and criteria, individual and social factors of maladaptive behavior, and types of therapy. The course will also include methods of clinical assessment and research strategies.

Gr. 11-12 Semester Prerequisite: Intro to Psychology OR Advanced Placement Psychology

Advanced Placement Psychology – is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students will also learn about the ethics and methods psychologists use in their science and practice. Taking the AP exam is optional. (Refer to Special Programming Options on Page 37 for more information.)

Gr. 11-12 All Year Prerequisite: none

TECHNOLOGY EDUCATION

Introduction to Technology A – introduces students to manufacturing processes involving woods. This course deals with the development of skills, techniques and safe use of hand/power tools and equipment. Classification and application of materials and calculation of materials costs will be covered. Students will develop skills needed to complete a series of projects and design solutions. Problem solving, planning, drawing and design, measurement, quality control and safety are all stressed as students' design and build products in wood.

Gr. 9-12 Semester Prerequisite: none

Introduction to Technology B — This course examines the impact trades have on communities and the world. Skills that are covered include estimating, drafting, blueprint reading, and home maintenance. Students will become more familiar with career opportunities and skills required within the related trade fields through hands-on training. Students will also have a basic introduction to shielded metal arc welding and aerodynamics.

Gr. 9-12 Semester Prerequisite: none

<u>Metal Manufacturing I</u> – covers the basic metal machinery fundamentals with practice in using the drill press, plasma cutter, cutting saws, lathes, and milling machine. This course will also present the basic fundamentals of welding with practice in arc, gas and wire-feed welding.

Gr. 10-12 Semester Prerequisite: none

<u>Small Engines</u> – covers both 2-stroke and 4-stroke cycle engines. Includes disassembly, inspection, reassembly, maintenance, and troubleshooting of small engines. Students will also learn how to measure with a caliper and micrometer.

Gr. 10-12 Semester Prerequisite: none

<u>Wood Manufacturing</u> – students work as a team to design, draw, and produce a piece of furniture. Teams elect leaders who are in charge of determining the specifics of the project. All pieces/parts of the product are produced by each team member. Team members then pick their favorite pieces of the project to assemble, stain, and finish individually. The class focuses on the quality and consistency of each manufactured piece.

Gr. 10-12 Semester Prerequisite: Intro to Tech A or B or Just for Girls Tech

<u>NEW!! Intro to Construction</u> – This course examines the building trades industry. The topics that ae covered include tool and workplace safety, general contracting, drafting, blueprint reading, carpentry, and building codes. Students will become more familiar with career opportunities, apprenticeship programs and skills required within the construction field though project based leaning. School and community projects may also be incorporated into this course.

Gr. 10-11 Semester Prerequisite: Intro to Tech A or B or Just for Girls Tech

<u>Just for Girls Tech</u> – Students will begin or advance their development in woodworking, craftsmanship, and measurement by designing and building several small woodworking projects and the possible opportunity of a choice project. In this all girls class, you will be working on mastering skills in problem solving, machine/tool operation, time management, and orthographic drawing designs. If time permits a small exploration of welding may also occur.

Gr. 09-12 Semester Prerequisite: none, but Intro to Tech A preferred

Operating Engineer Pre-Apprenticeship Program – is a series of courses offered through Destinations Career Academy of Wisconsin. This program prepares students to enter an apprenticeship training program to become a journeyman operating engineer in the construction industry. Operating engineers work as heavy equipment operators, mechanics, or surveyors. **The classes meet before school from 7:00 a.m. to 8:00 a.m. Daily attendance is mandatory.** As a part of this program students will learn more about the Transportation Alliance for New Solutions which is a program that begins the training process for individuals who are interested in a career in the construction industry. These courses may offer transcripted/dual credit through Fox Valley Technical College. (Refer to Special Programming Options on Page 36 for more information.) Courses include:

Basic Grade Construction

Gr. 10-12 Semester Prerequisite: none

Up to 2 of the following 3 options can be taken concurrently

Intro Basic Equipment

Gr. 11-12 Semester Prerequisite: Basic Grade Construction

Intro to CDL

Gr. 11-12 Semester Prerequisite: Basic Grade Construction

Basic Maintenance

Gr. 12 Semester Prerequisite: Basic Grade Construction & Intro Basic

Equipment

<u>ABC's of the Automobile</u> – provides a simple, basic approach to understanding the modern automobile. The class will provide lifetime benefits and skills to students. Simple repair and maintenance procedures will be demonstrated. Students will experience hands-on related activities in the lab. Students enrolled in this course **DO NOT** need to have their own vehicle to work on.

Gr. 11-12 Semester Prerequisite: none

<u>Auto Mechanics I</u> – This course is recommended for students who are in search of knowledge related to how the automobile works and how to perform basic maintenance needed to keep an automobile in good operating condition. Content taught in the classroom includes, but is not limited to: basic engine operation, lubrication system function and maintenance, basic ignition system maintenance, brake system operation and maintenance, steering and suspension system maintenance, and basic electrical system diagnosis and maintenance. In addition to maintenance of the automobile, other units of instruction will include college and career awareness and exploration, and buying a used car. During lab time students will learn proper use of tools and equipment, how to recognize common problems with automobiles, and will learn skills to keep a vehicle in good operating condition. Students do not need to own a vehicle to be enrolled in this course.

Gr. 11-12 Semester Prerequisite: none

<u>Auto Mechanics II</u> – This course is for the student that wishes to further expand their knowledge of the automobile. Students will learn: identification of engine components – their design, construction, and applications, how to use technical service manuals including the use of computerized databases to solve auto related problems, diagnosis and repair of the automobile's electrical/electronic systems, students will study computerized engine controls, diagnosis of steering and suspension system problems, and learn how to complete a basic wheel alignment, ABS Systems, & SIR and SRS Airbag Systems. Students will also learn skills related to many careers in the automotive industry.

Gr. 11-12 Semester Prerequisite: Auto Mechanics I

<u>Cabinet Making</u> – students continue developing their woodworking skills and craftsmanship by designing and building their own piece of furniture while learning and utilizing more advanced machine operations. Quality craftsmanship, problem solving, time management, and measurement skills are stressed.

Gr. 11-12 Semester Prerequisite: Wood Manufacturing

<u>High Mileage Vehicle</u> – students research, design and develop a single person, fuel efficient vehicle, powered by a single cylinder, 4-stroke engine. The students attend and test their vehicle in a competition at Road America Elkhart Lake in the spring.

Gr. 11-12 All Year Prerequisite: Small Engines and Metal Manufacturing is

highly recommended

<u>Metal Manufacturing II</u> – includes advanced welding and machining procedures. Units covered will Include: reading weld symbol and prints; overhead, vertical and horizontal arc welding positions; and TIG welding. Students will choose their own project. This course may offer transcripted/dual credit through Northcentral Technical College. (Refer to Special Programming Options on Page 38 for more information.)

Gr. 11-12 Semester Prerequisite: Metal Mfg. I

Electromechanical 1 – this course will cover the basics of OSHA safety programs and machine safety. It will also cover the use of digital volt meters, basics of Direct Current (DC) and Alternating Current (AC) electrical circuits and components along with building and testing construction, engineering, and electromechanical maintenance. This course may offer transcripted/dual credit through Northcentral Techincal College. (Refer to Special Programming Options on Page 38 for more information.)

Gr. 11-12 Semester Prerequisite: none

Electromechanical 2 – this course continues on from EM1. In this course students will work on AutoCad drawing program doing two dimensional layouts for industrial applications. They will also work with microcontrollers designing and building circuits that include LED displays, buzzers, motors, relays, switches and sensors. This course may offer transcripted/dual credit through Northcentral Technical College. (Refer to Special Programming Options on Page 38 for more information.)

Gr. 11-12 Semester Prerequisite: Electromechanical 1

<u>Electromechanical 3</u> – this course will build on concepts learned in Industrial Electronics 1 and 2 to build AC and DC circuits along with silicon controlled devices. Students will build electronic circuits to perform different work tasks in the lab. It also includes an introduction to fluid power (hydraulic and pneumatic) systems and concepts. Students will design fluid power systems and build them in the lab. This course may offer transcripted/dual credit through Northcentral Technical College. (Refer to Special Programming Options on Page 38 for more information.) This course will run during Electromechanical 1 or 2. Students will work independently with instructor available for help.

Gr. 12 Semester Prerequisite: Electromechanical 2

Electromechanical 4 – this course will build on concepts learned in Fluid Power systems 1. Students will explore pneumatic system components such as compressors, actuators (linear and rotary) along with pneumatic tubing. They will build various projects in the lab using pneumatic components. Students will also begin using Solidworks 3D modeling software to create various drawings and components for labs. This course may offer transcripted/dual credit through Northcentral Technical College. (Refer to Special Programming Options on Page 38 for more information.) This course will run during Electromechanical 1 or 2. Students will work independently with instructor available for help.

Gr. 12 Semester Prerequisite: Electromechanical 3

<u>Building Construction</u> – students learn entry level carpenter employment skills such as building layout, framing, siding, shingling, and finish trim of a building. Students also learn about cost estimation of building projects, reading and interpreting blueprints, basic cabinetry while working on community service projects. Problem solving, time management, and measurement skills are stressed. (3 credits – 3 hours/day)

Gr. 12 All Year Prerequisite: Cabinet Making

or Intro to Construction

WORK BASED LEARNING

MASH Employment Partnership – is a year-long program open to seniors interested in obtaining work skills or who are interested in going directly to work after graduation. Students will learn work skills while gaining high school credit and earning a wage. This option requires students to attend regular classes throughout the morning and spend the remainder of the school day at a work site. Acceptance into the program is determined by previous school records. Students must apply for this program during the spring of their junior year. Placement in this program is dependent on work site availability. Gr. 12 All Year Prerequisite: none

<u>Mentorship</u> – provides students with the opportunity to explore career options in a real world setting. Students **must** complete an application. Acceptance into the program is determined by previous school records, attendance history, and job site availability. Any student who was absent more than 10 days during the previous school year must have special approval by the program coordinator.

(1 credit – 2 hour/day)

Gr. 12 Semester Prerequisite: none

<u>Youth Apprenticeship</u> – is a one or two-year program where students:

- ► Follow a career pathway from high school to post-secondary institutions or the workforce
- ▶ Earn a paycheck and school credit while learning from skilled professionals
- ▶ Increase career awareness and improve future employability
- ► Receive a state-issued skills certificate which is recognized by employers

Programs are available in the following categories:

- Agriculture, Food and Natural Resources
- Architecture and Construction
- Business Management and Administration *NEW*
- Education and Training *NEW*
- Finance
- Graphic Design/Printing
- Health
- Hospitality and Tourism
- Information Technology
- Manufacturing
- Science Technology, Engineering and Math
- Transportation Distribution and Logistics

Interested students should pick up an application in Student Services.

Gr. 11-12 All Year Prerequisite: Varies

WORLD LANGUAGE

<u>Spanish I</u> – emphasizes learning to understand and speak Spanish but also includes basic reading and writing exercises. There is an introduction to Hispanic culture and customs. Students will be graded on daily assignments, oral practice, tests, and projects. All Spanish students may join the Spanish Club, which allows them the opportunity to participate in cultural activities. *If you are a native or heritage speaker of Spanish (you speak Spanish at home), you will need to be assessed for potential placement in a higher level or heritage Spanish class. *

Gr. 9-12 All Year Prerequisite: none

<u>Spanish II</u> — is a continuation of Spanish I, with a little more reading and writing. There is a more indepth study of life in Spanish speaking countries. *If you are a native or heritage speaker of Spanish (you speak Spanish at home), you will need to be assessed for potential placement in a higher level or heritage Spanish class. *

Gr. 10-12 All Year Prerequisite: Spanish I

<u>Spanish III</u> – will provide the student with continued development in listening, speaking, reading comprehension, and writing skills. The simple past tenses and more complex grammar skills will be introduced, and students will begin to give sustained presentations and dialogs about pertinent topics. Students will learn more about the diversity of Spanish speaking countries.

Gr. 11-12 All Year Prerequisite: Spanish II

<u>Exploring Latin American Culture</u> – Students will dive into the culture of various Latin American countries through projects that incorporate researching, applying, and celebrating practices including art, cuisine, dance, and pop culture. Students will develop terminology and skills to help in planning to travel internationally. This class is intended as an enrichment course rather than an alternative to Spanish II-V.

Gr. 11-12 Semester Prerequisite: Spanish I or Heritage Spanish

<u>Spanish IV</u> – Students will continue to broaden their skills in conversation, reading, and writing. Students will be introduced to new verb forms, and more advanced grammatical structures. Using magazines, internet sources, and other readings in Spanish, students will broaden their understanding of Spanish culture, civilization, and literature. Much emphasis will be placed on fine tuning advanced grammar skills in preparation for college placement tests.

Gr. 12 All Year Prerequisite: Spanish III

<u>Heritage Spanish</u> – This course is designed for students with an extensive background in spoken Spanish but little to no exposure to reading/writing. Students will develop knowledge of rules of spelling and grammar through exposure to literature and other primary sources appropriate to their level. Students will also gain knowledge of best practices for translating and tutoring in the target language.

Gr. 9-12 All Year Placement by instructor assessment

SPECIAL EDUCATION PROGRAMMING

Medford Area Senior High provides academic courses for students in special education. Placement in any special education program is contingent upon a full and comprehensive evaluation and the IEP team's conclusions with regard to the student's need for special education due to a handicap condition(s). Scheduling for individual courses is accomplished with the assistance of the special education teachers responsible for that program. Courses are dependent upon the student's individualized education plan. Services may be provided within the regular classroom setting with no special education support, with special education support, or in a class taught by a special education teacher. As a part of their transition from school-to-work, students may be placed at a worksite during their junior and/or senior years.

<u>Skills for Success 1</u> - This course is designed to help students navigate the social and emotional connection to school, teachers, staff, and peers as well as to their own learning and learning styles. The connections created will help them navigate high school. Students will develop the mental frameworks, organizational strategies and study skills.

Gr. 9-10 All Year Prerequisite: IEP Placement

Skills for Success 2 - This course is a continuation of Skills for Success 1 which continues to help students navigate the social and emotional connection to school, teachers, staff, and peers as well as to their own learning and learning styles. The connections created will help them navigate high school as a whole and prepare them for life after high school.

Gr. 11-12 All Year Prerequisite: IEP Placement

<u>Social Skills</u> - Students with an IEP will learn social emotional competencies that will help them in school, home, and in life. Students will acquire skills through role playing, classroom activities, and field trips in the community.

Gr. 9-12 All Year Prerequisite: IEP Placement

<u>Applied Business Concepts</u> - The Raider Cafe and Shoppe is a school store combined with a coffee/snack shop. The store is operated by students with teacher supervision. Students are able to practice job skills in a safe and fun environment. Students have the opportunity to use a cash register, small cooking appliances, and practice teamwork skills. The students will practice money skills through opening and closing the register. The proceeds from the money go towards scholarship(s) for students and other student activities.

Gr. 9-12 Semester/All Year Prerequisite: IEP Placement

<u>Resource Room</u> - Resource Room is a structured study hall for students with an IEP. Students will receive 1:1 or small group instruction in a quiet learning environment. They will receive academic tutoring, mentoring, social skills, and/or college or career readiness.

Gr. 9-12 Semester/All Year Prerequisite: IEP Placement

ENGLISH LANGUAGE DEVELOPMENT

Medford Area Senior High provides English Language Development courses and support for English Language Learners. Classification as an English Language Learner is contingent upon limited English Language Proficiency due to an exposure to a language other than English. English Language Proficiency is evaluated through a SIDA Screener language assessment if a language other than English is indicated on the Home Language Survey. Scheduling for individual courses and English Language Development support is accomplished with the assistance of the ELL teachers responsible for the program. Courses and/or supports are dependent upon the student's Language Development Plan. Services may be provided within the regular classroom setting (as suggested by the ELL teacher) without the presence of the ELL teacher, or in a class taught by the ELL teacher.

SPECIAL PROGRAMMING OPTIONS

Advanced Placement (AP) classes are currently offered in the following subject areas: Studio Art, English Language/Composition, English Literature/Composition, Calculus AB, Biology, Chemistry, Human Geography, US Government, US History, and Psychology. [See individual department listings for class descriptions.] These courses are a component of the district's Gifted and Talented Program. Medford's A.P. classes are part of a national program sponsored by the College Board. While local teachers design the courses offered at Medford, students may opt to complete a nationally offered test in May, except for AP Studio Art where students would submit a portfolio. Successful completion of this examination may earn a student three to six college credits, depending upon the individual college.

Since the A.P. classes are taught with college-level content in the high school, students should know that these courses require more intensive study and increased amounts of homework than a typical high school class. A.P. students and their parents need to consider the time obligations of these classes balanced against other high school classes, jobs, and co-curricular activities. Only students interested in challenging themselves should enroll in an A.P. class.

<u>Transcripted Credit</u> (Dual Credit) courses are taught by high school instructors and are of college level integrity and rigor. In addition to high school credit, juniors and seniors have the option of receiving technical college credit upon completion of the course. Exceptions may be made for sophomores on an individual basis. An official transcript with the grade(s) and credit(s) will be on record at the technical college.

The following courses may offer transcripted credit:

MASH Course	College	College Course	Course Number	College Credit
Dairy Production	NTC	Intro to Animal Science	10-091-104	3.0
Veterinary Science	NTC	Medical Terminology – Vet 1	10-091-172	3.0
Accounting IV	NTC	Accounting 1	10-101-111	4.0
Business Exploration	NTC	Intro to Business	10-102-124	3.0
App Development and Design	NTC	User Experience Design	10-152-223	3.0
IT Essentials	NTC	Computer Fundamentals I	10-154-100	3.0
Honors Financial Literacy	NTC	Cents & Sensibility	10-809-101	1.0
Marketing II/Social Media Marketing	NTC	Marketing Principles	10-104-172	3.0
Web Design	NTC	Web Design 1	10-152-211	3.0
Oral Interpersonal Comm.	NTC	Oral Interpersonal Comm.	10-801-196	3.0
Written Communication	NTC	Written Communication	10-801-195	3.0
Creative Cooking	NTC	Nutrition	10-316-107	2.0
Culinary Arts	NTC	Sanitation for Food Service Operations	10-316-100	2.0
Found of Early Childhood Dev	NTC	ECE: Foundations	10-307-148	3.0
Infant & Toddler Development	NTC	ECE: Infant & Toddler	10-307-151	3.0
Algebra II	NTC	Intermediate Algebra w/Appl	10-804-118	4.0
AP Calculus AB	NTC	Calculus 1	10-804-198	4.0
College Algebra with Appl	NTC	College Algebra with Appl	10-804-195	3.0
Medical Terminology	NTC	Medical Terminology	10-501-101	3.0
Auto Mechanics	NTC	Auto Service Fundamentals	10-602-107	2.0
Metal Manufacturing II	NTC	Intro to Welding	10-422-101	2.0
Basic Grade Construction	FVTC	Basic Grade Construction	50-447-518	1.0
Intro Basic Equipment	FVTC	Intro Basic Equipment	50-447-543	1.0

Basic Maintenance	FVTC	Basic Maintenance	50-447-519	1.0
Electromechanical 1	NTC	Industry Workplace Safety	10-620-172	1.0
Electromechanical 1	NTC	Industrial Electronics Tech 1	10-660-123	1.0
Electromechanical 1	NTC	Industrial Electronics Tech 2	10-660-124	1.0
Electromechanical 2	NTC	Autocad for Technicians	10-620-171	1.0
Electromechanical 2	NTC	Intro to Microcontrollers	10-660-121	1.0
Electromechanical 3	NTC	Industrial Electronics Tech 3	10-660-125	1.0
Electromechanical 3	NTC	Fluid Power Systems 1: Fundamentals	10-612-120	1.0
Electromechanical 4	NTC	Fluid Power Systems 2: Fundamentals of Pneumatics	10-612-121	1.0
Electromechanical 4	NTC	Solidworks 1	10-606-165	1.0

<u>Distance Learning</u> classes are offered in various subjects. (See individual department listing for class descriptions.) For more information regarding distance learning classes, please contact your counselor. If the student receives a failing grade in a course or fails to complete a course, the student's parent/guardian, or the student, must reimburse the school district the amount paid by the school district on the students' behalf.

<u>Independent Study</u> provides individual students with the option of exploring topics of special interest in any department or when necessary to resolve scheduling conflicts. Requires approval of instructor, principal, school counselor, parent/guardian and student. **Students are limited to 1 Independent Study per year.**

Gr. 12 Semester Prerequisite: Department Specific

<u>Teacher Assistant</u> – provides students with the opportunity to work closely with a teacher in a subject area of special interest or ability. Each student will be matched with an individual high school teacher and will work as an in-class assistant. **Students are limited to 1 Independent Study per year.**

Gr. 12 Semester Prerequisite: Instructor Consent

On-Line Courses are a component of the district's Gifted and Talented Program. These courses are available to juniors and seniors that have exhausted course offerings at MASH. Enrollment in an on-line course requires approval of the principal and counselor. A student can enroll in a maximum of two (2) A.P. on-line courses per semester. If the student receives a failing grade in a course or fails to complete a course, the student's parent/guardian, or the student, must reimburse the school district the amount paid by the school district on the students' behalf.

<u>Peer Tutor</u> – Students must be willing to assist other students with academic subjects. They are scheduled one hour per day to the Workshop along with a supervising teacher. Attendance, academic strength, and approachability are keys to succeeding in this class. There is a limited number of spots available for this opportunity. Strong math skills are encouraged!

Gr. 11-12 Semester Prerequisite: An application/interview may be required

The <u>Global Education Achievement Certificate (GEAC)</u> is a nationally-recognized program that awards distinction to students who demonstrate readiness for a 21st Century global society. Student Global Scholars who complete the program receive an official certificate from the Wisconsin Department of Public Instruction. See your school counselor, world language, or ELL teacher for additional requirements and information.

Criteria:

- 8 Credits Coursework:
 - 4 credits of a single world language (including English courses for English Language Learners)
 4 credits from multidisciplinary courses* with a global focus or perspective in curriculum
- Cultural Literacy: independent review & reflection on 8 works of media, including 4 books
- Participation and leadership in 4 Co-Curricular and other School-sponsored Activities
- Community Service: 20 hours of volunteer service to a project on an intercultural or global issue

^{*}The following courses may be selected to apply towards GEAC credits:

COURSES	CREDITS
Forestry	0.50
Art Exploration	0.50
Hands-On Art History	0.50
Entrepreneurship	0.50
Global Kitchen	0.50
PLTW: Bioengineering	1.00
AP US History	1.00
Human Geography	1.00
Literature & Composition 12	1.00

COMMON GRADING SCALE

Letter grades will be earned using the following common grading scale.

Α	93 – 100%	B-	80 - 82.99%	D+	67 – 69.99%
A-	90 – 92.99%	C+	77 – 79.99%	D	63 – 66.99%
B+	87 – 89.99%	С	73 – 76.99%	D-	60 – 62.99%
В	83 – 86.99%	C-	70 – 72.99%	F	0 – 59.99%

STUDENT EVALUATION

Medford Area Senior High School uses letters for grades. The point values (except for weighted) are as follows:

Α	=	4.00 points	C-	=	1.67 points
A-	=	3.67 points	D+	=	1.33 points
B+	=	3.33 points	D	=	1.00 point
В	=	3.00 points	D-	=	.67 points
B-	=	2.67 points	F	=	0 points – indicates failure
C+	=	2.33 points	I	=	0 points – indicates incomplete work
С	=	2.00 points	Е	=	.33 points – indicates passing on effort

An "I" is changed to a failure if the work is not completed within two weeks, or for exceptional cases, within an amount of time agreed upon by the teacher.

For the 2020-2021 school year, all AP classes as well as Honors Physics have been designated as weighted. Students will receive one additional grade point for these courses (A=5.0, A-=4.67, B+=4.33, B=4.0, B-=3.67, C+=3.33, C=3.0, C-=2.67, D+=2.33, D=2.0, D-=1.67, F=0, E=.33). If a student's need dictates the offering of a fifth year course in either French or Spanish, that class will be weighted.

Courses will not be weighted if taken by correspondence, independent study, on-line or as summer enrichment unless prior approval is granted by the department involved and the principal.

HONOR ROLL

In determining the honor roll, the grades of all subjects are included. The grade point average, as shown on the report card, is used in listing the honor rolls as follows:

Academic Distinction: 3.800 GPA and higher based on current semester grades

High Honors: 3.500-3.799 GPA based on current semester grades **Honors:** 3.000-3.499 GPA based on current semester grades

Students who earn placement on "Academic Distinction or High Honors" for two semesters, accumulated anytime during their Medford Area High School career, will receive an academic letter award. A letter "M" will be awarded for the first two semesters of achievement; subsequent two semester blocks of achievement will be recognized by stars to be pinned on the letter.

ACADEMIC AWARDS

Cum laude is a Latin term that means with honor. It is used to refer to students who have met high academic standards and take challenging and rigorous course work. There are three honors that are bestowed on graduates: Cum Laude which means with honor, Magna Cum Laude which means with great honor, and Summa Cum Laude which means with greatest honor.

In order to receive the Cum Laude award, a student must achieve the following:

Cum Laude: 3.500-3.799 grade point average
 Magna Cum Laude: 3.800-3.999 grade point average
 Summa Cum Laude: 4.000 and higher grade point average

2. Take 10 semesters of honors or AP courses

Graduating seniors who have earned a Cum Laude award will be given a corresponding medal to wear at graduation.

Per the Wisconsin Department of Public Instruction, weighted grades, as provided for in the district policy, will be used to determine grade point average for the Wisconsin Academic Excellence High Education Scholarship. Annually, at the end of first semester and before February 15, the Board of Education shall select two seniors with the highest grade point averages in all subject areas completed during grades 9-12. All courses completed will be included in the grade point average.

The Cum Laude award is officially given at graduation ceremonies where students who have earned it are given a corresponding medal to wear during graduation. At each spring academic assembly students who are "on track" to earn the award are recognized. The following is a reference to determine students who are on track to be recognized at the assembly:

Number of semesters a student must have completed to be on track for a Cum Laude award:

Freshman Year: 2 semesters of honors or AP courses
Sophomore Year: 4 semesters of honors or AP courses
Junior Year: 7 semesters of honors or AP courses
Senior Year: 10 semesters of honors or AP courses

PREPARING FOR A 4 YEAR COLLEGE/UNIVERSITY

Which courses should I take in high school?

Students graduating from high school will be required to take a minimum of 17 high school credits, distributed as follows:

English 4 credits
Mathematics 3 credits
Social Science 3 credits
Natural Science 3 credits
13 credits
Academic Electives 4 credits

Total core college preparatory credits 17 credits

Elective credits must be chosen from the above core college preparatory areas, foreign language, fine arts, computer science, and other academic areas. Some UW System institutions may also accept vocational courses for some of the four (4) elective credits.

Some careers require more courses in special areas. For example: if you would like to major in engineering, you should take four years of mathematics, as well as chemistry, physics and computer science. Other majors such as business, allied health, agriculture and many more, also require additional high school preparation. Your counselor can help you decide which courses beyond the required college prep courses are right for you.

Do I need to take Foreign Language in high school for college?

UW-Madison and some private colleges require a minimum of two credits of a single foreign language. Students planning to attend a four-year college should be aware of foreign language requirements. Some colleges may offer retro credits for students who score accordingly on placement tests. For more information see your school counselor, consult the <u>Introduction to the University of Wisconsin System</u> book available in Student Services or the University of Wisconsin Help website at www.uwhelp.wisconsn.edu.

What do I have to do to be admitted?

You need to graduate from high school, complete the course requirements outlined in this brochure, earn good grades, and take the American College Test (ACT). Depending on your chosen college, the SAT may be required.

PREPARING FOR VOCATIONAL -TECHNICAL COLLEGE

The Wisconsin Technical College System provides a broad range of programs and career opportunities. To prepare for these programs students should generally follow a 4-year college preparatory program in high school. However, students should take the high school technical classes related to their areas of career interest. Technical schools are expecting all entering students to have a solid technical skills background and a solid academic (math, English, science, social studies) foundation. Students should talk with their individual counselor and to the specific vocational/technical teachers about the programs in which they are interested. The entrance requirements and recommended high school courses vary so much from school to school and program to program that we have not listed them here.

Some of the technical college programs fill up very fast. Students who are interested in these programs and who meet the admission requirements are encouraged to apply at the end of their junior year of high school. However, some schools do not accept applications until the fall of your senior year. See specific college catalogs or ask in the Student Services office for more information.

CLASS RANK

MASH is a non-ranking school. When an organization asks for a class rank on an application, it is advised to write "My school does not rank."

Due to tremendous differences in curricula and grading standards at different high schools, many admission offices and scholarship selection committees have begun to discount the accuracy and importance of class rank as a factor in evaluating students. Colleges and Scholarships that used to rely on class rank now use ACT scores and GPA. Scholarships will also use these, as well as other criteria such as rigor and relevance of courses, community service, essays, etc. that is reported on the application for consideration.

THINKING ABOUT THE ARMED FORCES

If you are thinking about the Armed Services as a lifetime career or simply enlisting for one term, you may consider taking the ASVAB (Armed Services Aptitude Battery). The ASVAB is an exam used by the military to help place students into different career areas. This test is available to Juniors and Seniors. Military recruiters schedule regular visits at the high school. If you would like more information regarding any branch of the military, stop in Student Services.

NON-DISCRIMINATION

The Medford Area Public School District does not discriminate against pupils on the basis of sex, race, national origin, ancestry, creed, religion, pregnancy, marital or parental status, sexual orientation, or physical, mental, emotional, or learning disability or handicap in its education programs or activities. Federal law prohibits discrimination in employment on the basis of age, race, color, national origin, sex, religion, or handicap.

As of right now I would probably pick a career in:

(Circle one or more)	
Agriculture/Food/Natural Resources	Hospitality
Architecture/Construction	Human Services
Arts/AV/Communication	Information Technology
Business/Management/Admin	Law/Public Service/Security
Education/Training	Manufacturing
Finance	Marketing
Government	Science/Technology/Engineering
Health	Transportation/Distribution/Logistics
The career I am specifically interested in is:	
To receive my education & training I'm planning on ente	ring/enrolling in: (please circle)
Apprenticeship	Technical College
Military	University
Workforce	
Based on my current college and career interests the sp	pecific courses that I need to have in my schedule include
Other courses that are very important to have in my sci	hedule include:
Skills that I need to acquire or strengthen for my chose	n field are:
Opportunities or resources I can explore to meet this go	oal are:

My Four Year Plan

GRADUATION REQUIREMENTS						
COURSES CREDITS						
English	4.00					
Math	3.00					
Science	3.00					
Social Studies	3.00					
Financial Literacy	0.50					
Health	0.50					
Physical Education	1.50					
Life Management	0.25					
Fine Arts	0.50					
Vocational Education	0.50					
Electives	7.00					
Civics Exam	-					
Community Service Hours	-					
TOTAL MINIMUM CREDITS	23.75					

CAREER I	NTERESTS
Agriculture/Food/Natural Resources	Hospitality
Architecture/Construction	Human Services
Arts/AV/Communication	Information Technology
Business/Management/Admin	Law/Public Service/Security
Education/Training	Manufacturing
Finance	Marketing
Government	Science/Technology/Engineering
Health	Transportation/Distribution/Logistics

*Course number does not correspond with which hour of the day you will have that particular class.

ADE 9	1 st Semester		2 nd Semester		
	Schedule Template	My Classes	Schedule Template	My Classes	
Course 1	[Honors] English 9		[Honors] English 9		
Course 2	Math Course		Math Course		
Course 3	[Honors] Physical Science		[Honors] Physical Science		
Course 4	[AP] Human Geography		[AP] Human Geography		
Course 5	Phy Ed/Elective		Driver Ed/Life Mgt		
Course 6	Elective		Elective		
Course 7	Elective		Elective		
Course 8	Study Hall/Elective		Study Hall/Elective		

ADE 10	1 st Semester		2 nd Semester	
	Schedule Template	My Classes	Schedule Template	My Classe
Course 1	[Honors] English 10		[Honors] English 10	
Course 2	Math Course		Math Course	
Course 3	[Honors] Biology		[Honors] Biology	
Course 4	[AP] US Government		[AP] US Government	
Course 5	Health		Phy Ed/Elective	
Course 6	Elective		Elective	
Course 7	Elective		Elective	
Course 8	Study Hall/Elective		Study Hall/Elective	

*Course number does not correspond with which hour of the day you will have that particular class.

GRADE 11	1 st Semester		2 nd Semester	
	Schedule Template	My Classes	Schedule Template	My Classes
	[AP] [Honors]		[AP] [Honors]	
Course 1	Language 11		Language 11	
Course 2	Math Course		Math Course	
Course 3	[Honors] Chemistry		[Honors] Chemistry	
Course 4	[AP] US History		[AP] US History	
Course 5	Phy Ed/Elective		Elective	
Course 6	Elective		Elective	
Course 7	Elective		Elective	
Course 8	Study Hall/Elective		Study Hall/Elective	

GRADE 12	1 st Semester		2 nd Semester		
	Schedule Template	My Classes	Schedule Template	My Classes	
Course 1	[AP] [Honors] Literature 12		[AP] [Honors] Literature 12		
Course 2	[Honors] Financial Literacy		Phy Ed/Elective		
Course 3	Elective		Elective		
Course 4	Elective		Elective		
Course 5	Elective		Elective		
Course 6	Elective		Elective		
Course 7	Elective		Elective		
Course 8	Study Hall/Elective		Study Hall/Elective		