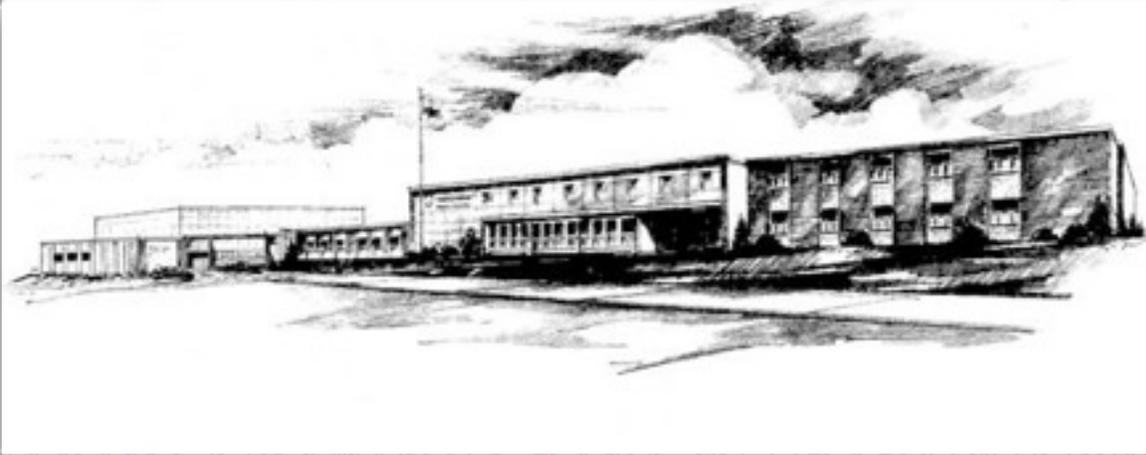


Marathon High School Registration Guide



2016-2017

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DEAR PARENTS AND STUDENTS:

Planning a course of study for the high school years is an extremely important responsibility. It is vital that you as parents and students work closely with each other and the school in developing this plan. This registration booklet was designed to help explain the high school program and to assist you in the development of your high school four-year plan.

Within this booklet you will find information on graduation requirements and course descriptions. In addition, Mr. Kelter, the guidance counselor, has included general information pertaining to a college, post secondary vocational and technical training, and the world of work after graduation. Finally, department objectives and specific course offerings are provided. You are urged to read through the entire booklet before reaching any decisions on course selections. **Once the registration process is completed changes in a schedule will be allowed only due to exceptional need as determined through a parent, student, counselor and principal conference.** Prior thought and planning will ensure a schedule that meets your needs.

Prior to registering your son or daughter for next year, Mr. Kelter will meet and discuss their progress to date, graduation requirements, and course offerings. Many questions will be answered during these discussions and with the help of this booklet; however, we realize there may be some unanswered questions. Please feel free to contact myself or Mr. Kelter with any questions you may have.

Please call the school, 715-4434-2226, should you have any scheduling questions.

Sincerely,

David Beranek, Ed.S.
MHS Principal

MISSION STATEMENT:

The Marathon School District is committed to providing all students with a quality education and the skills they need to be successful. We will continuously improve instructional programs and provide learning experiences that meet the individual needs of students in a safe and supportive environment by developing an exceptional staff and partnering with families and the community.

VISION STATEMENT:

The Marathon School District will continue to create an exceptional educational system that is recognized for the academic excellence and character of its students, the professionalism and expertise of its staff, and the quality and diversity of its programs.

NONDISCRIMINATION STATEMENT:

The Marathon School District is committed and dedicated to the task of providing the best education possible for every child in the district for as long as the student can benefit from attendance and the student's conduct is compatible with the welfare of the entire student body. The right of the student to be admitted to school and to participate fully in curricular, extracurricular, student services, recreational or other programs or activities shall not be abridged or impaired because of a student's sex, race, religion, national origin, color, ancestry, creed, pregnancy, marital or parental status, sexual orientation or physical, mental, emotional or learning disability or handicap.

GRADUATION

REQUIREMENTS AND GUIDELINES

In planning a program of study during the high school years it is important to understand the requirements which must be met by a student to allow him/her to receive the high school diploma from Marathon High School. Should any questions arise please do not hesitate to contact the school.

1. Each student must have attended eight semesters of secondary school to be eligible for graduation from Marathon High School.
2. One half credit (the exception will be phy-ed) will be given for each semester of successfully completed (grade of D- or better) course work.
3. A minimum of 21 credits of coursework will be required for graduation. The specific requirements are as follows:
 - 4 credits in Language Arts (including English 9, English 10, English 11, English 12)
 - 3 credits in Mathematics
 - 3 credits in Science (including General Science 9 and Biology 10)
 - 3 credits in Social Studies (including US History, American Government)
 - .5 credit in Health Education (During grades 7-12)
 - .5 credit in Business Education Personal FinanceAND 7 credits in elective areas and passing with a 60% or better the State Civics Test

In addition students are required to complete 3 semesters of physical education.

Each student must have earned a minimum of 21 credits plus physical education to graduate. Please review the Credit Requirement Sheet on the Guidance webpage for further clarification.

4. Only students meeting the above requirements will be allowed to participate in commencement. Students identified as having exceptional educational needs as defined in Chapter 115 of the state statutes, and who have followed a prescribed, supervised program of related study and activity, will be granted a regular diploma.

CAREER PLANNING INTRODUCTION

Your high school experience is extremely important in helping you to shape and achieve your goals. While all high school students are required to meet certain course and total credit requirements, there is considerable flexibility for students to choose courses which will allow them to gain exposure in a number of areas and thus acquire a well rounded educational experience.

The decisions you make will be important. When careful decisions are made, it is more likely that the outcome will be satisfying. A skillful decision maker has more personal freedom in his/her life because he/she is more likely to recognize, discover, or create new opportunities and alternatives. He/she also has greater control over his/her life because he/she can reduce the amount of uncertainty in his/her choices and limit the degree to which chance or other people determine their future.

Below you will find a few helpful thoughts and considerations for developing your course of study while at Marathon High School. The comments provided are general in nature to assist you in this planning. It is important that all students, regardless of past high school goals, seek continual guidance from the counseling department through your four years of planning and study to help assure that decisions you make will help you reach your goals.

POST-SECONDARY OPTIONS

In selecting courses to take in high school, students should always ask themselves, “how is this course going to help me after high school.” The skills required in the workplace are increasing yearly - in 1950, 60% of the occupations in the United States were unskilled jobs; in 1989, 35% of the occupations were unskilled jobs; and currently under 20% of the occupations will be unskilled jobs. These statistics mean that either students need to prepare themselves for additional training after high school, which means college or technical college, or develop the skills needed to succeed on the job as they go through high school.

If a student is preparing for an occupation upon completion of high school, careful planning has to go into their selection of courses. Besides the required courses for graduation, students need to concentrate on courses that will provide them the opportunity to learn skills that will be needed in their chosen field of work. Students should not limit themselves to one specific area of study as they may discover different interests after high school as they go to college or enter the workplace.

If a student is planning on going on for additional training after high school, careful planning has to go into course selection. With the increase in skills needed to succeed on the job, the requirements to get into and succeed in two-year technical colleges and four-year colleges and universities have also increased. The requirements to get into a two-year technical college vary just slightly from what is required to get into a four-year college or university, depending on the type of program a student wants to enter. All students taking a post-secondary training track through high school should develop competencies in the areas of reading, writing, speaking, listening, mathematics, reasoning, and organized study.

Whatever track a student decides to pursue through high school, it is important for them to carefully plan their course selection and reassess each year to ensure that they are taking a broad program, reinforcing good strengths, and strengthening their weaker skills.

EARN TRANSCRIPTED CREDIT FOR HIGH SCHOOL COURSES

What is it?

Transcribed credit is the name given to a high school course that is identical to a technical college course. The high school agrees with the technical college to teach the college course at the high school. The junior or senior student earns both high school and technical college credit for the course and receives both a high school transcript and a college transcript showing the transcribed credits earned.

What are the benefits?

You earn college credits at the same time you are fulfilling your high school graduation requirements. You can get a head start on your college education, at no cost to you.

How do I get it?

You enroll in a transcribed credit course at your high school. Your teacher will have you fill a form to register at NTC.

Need more information?

Contact your high school School-to-Career Coordinator or your counselor to find out if your school offers any transcribed credit courses.

Transcribed Credit Courses Available?



Transcribed credit courses currently available are listed below. Look for the NTC logo by the class description. More courses will become available in the future.

AGRISCIENCE EDUCATION

- Animal Science & Advanced Animal Science (must be taken in the same school year) worth 3 credits for Intro to Animal Science
An additional 2 credits may be earned for Medical Terminology-Vet I
- Horticulture and Plant Science and Greenhouse Management (must be taken in same school year) worth 3 credits for Intro to Horticulture
- Agribusiness Management and Marketing (semester course) worth 1 credit for Orientation to Dairy Science
- Conservation of Natural Resources worth 2 credits for Alternative Energy Systems Overview

BUSINESS AND INFORMATION TECHNOLOGY EDUCATION

- Accounting worth 3 credits
- Marketing worth 3 credits for Marketing Principles
- Employability Skills

TECHNOLOGY AND VISUAL ARTS

- Woods
- Intro to Drafting
- Architectural Drafting

ENRICHMENT OPTIONS

Marathon High School offers a number of opportunities for the high achieving student. A general overview of the three programs is discussed below. Additional information should be pursued through the Principal or Guidance Counselor.

Postsecondary Enrollment Options (Youth Options / Course Options) are programs in which 11th or 12th grade students may opt to attend a Wisconsin institution of higher education for the purpose of taking one or more courses offered by that institution which would then apply toward credit required for high school graduation. All applications and additional paperwork are available on Marathon High School's Guidance page.

If interested in participating in these program you must file an application with the Marathon School Board by these dates:

October 1st: Deadline to file for Youth Options program for 2nd semester of the current school year.

March 1st: Deadline to file for Youth Options program for 1st semester of the next school year.

Please take special note Marathon School District allows for up to 18 credits to be taken through Youth Options Program, and students are only eligible for up to two courses per semester for the Course Options Program.

While these programs are free, students and parents will be responsible for payment of such courses if the student drops the course after the drop deadline or fails the course.

1. YOUTH OPTIONS

Wisconsin's youth options program allows public high school juniors and seniors who meet certain requirements to take postsecondary courses at a UW institution, a Wisconsin technical college, one of the state's participating private nonprofit institutions of higher education, or tribally-controlled colleges. Approved courses count toward high school graduation and college credit.

The program opens the door to greater learning opportunities for motivated students considering a technical career, wishing to begin college early, or preparing themselves to enter the workforce immediately after high school graduation.

Under youth options, a student does not pay for a college course if the school board determines the course qualifies for high school credit and is not comparable to a course already offered in the school district. If approved by the school board, the student can receive both high school and college credit upon successful completion of the course. A student who successfully completes their high school graduation requirements earns a high school diploma regardless of whether the requirements were met while attending a high school or college.

All colleges and universities have their own requirements for students participating in Youth Options. Other colleges may restrict which courses are open to high school Youth Option students. If a student is interested in taking a course through a Wisconsin Institution of Higher Education it is important to start planning early. For more information contact the Guidance Office or the school you wish to take the course through.

2. COURSE OPTIONS

2013 Wisconsin Act 20, the 2013-15 biennial budget act, eliminated Part-Time Open Enrollment and, in its place, established a new program for students entitled Course Options. Course Options still provides a means for Wisconsin students to take courses offered by other Wisconsin school districts, but now also includes the opportunity for students to enroll in courses offered by charter schools, various institutions of higher education, and approved nonprofit organizations at no cost to the student.

Specifically, the new Course Options law allows a pupil enrolled in a public school district to take up to two courses at any time from an educational institution. Wisconsin Educational institutions are defined under the Course Options statute as:

- A public school in a nonresident school district;
- the University of Wisconsin System;
- a technical college;
- nonprofit institutions of higher education;
- a tribal college;
- a charter school; and
- a nonprofit organization that has been approved by the Department of Public Instruction (DPI).

3. DISTANCE LEARNING COURSES

Through our Distance Learning Lab we offer other high school and college courses through interactive television. Students interested in taking these classes will need to contact Mr. Kelter and also review the Distance Education Registration Handout on the Guidance webpage. For any of the college courses listed, the same timeline and requirements are required as listed above.

ADVANCE PLACEMENT PROGRAM

Advance Placement is a program of college-level exams that gives high school students the opportunity to receive advanced placement and/or credit in college.

INDEPENDENT STUDY PROGRAM

In the Independent Study Program a student has an opportunity to pursue a particular subject in order to increase his knowledge and competence within that field. The student will be expected to move at his/her own rate of speed and with a high degree of responsibility for his/her own learning and direction. For information and application on all of the above programs check with the Guidance Office.

SCHOOL TO CAREER PROGRAM

Through the School to Career Program, Marathon High School provides opportunities for students to gain work experience and learn about career opportunities. The program has three different components:

- | | |
|-----------------------|--|
| Co-op: | A one-year school sponsored, paid work experience, for Juniors and Seniors that provides work experience along with related classroom instruction. |
| Youth Apprenticeship: | A one or two year program for high school seniors who are interested in specific occupations. |

Employability Skills Certificate: A one year program for seniors that recognizes a student's mastery of employability skills valued by employers, to help students explore a career interest and to provide a credential of student mastery of employability skills.

For more information on School to Career please contact Mr. Winkler.



DEPARTMENT INFORMATION:

Agriculture today is more than cows and plows. As America's largest and most basic industry, agriculture employs 30% of the work force in the Midwest. There are hundreds of careers available in agriculture involving everything from computers and combines to research and education. There is a severe shortage of educated people to fill these jobs, so the employment outlook is great!! Whether you realize it or not, many of you will be employed in agriculture during your lifetime.

The agriscience education program is designed to prepare students for the opportunities available in agriculture careers and to give students valuable knowledge for use in everyday life.

Students entering the program are encouraged, but not required, to enroll in Introduction to Agribusiness. Students have the opportunity to become active FFA members. The goals of the FFA are to develop leadership and organizational skills through combining classroom and FFA activities

COURSE DESCRIPTION:

Animal Science-One Semester - .5 Credit



Animal Science will cover topics relating to both large and small domesticated animals. Students will cover general topics including animal welfare, genetics, nutrition, reproduction, and safety and environmental issues with animals. This course is taught with an applied science emphasis. The objective of the course is for students to understand the role of animals in our society and to become an educated consumer. This course is suggested for students interested in an animal or veterinary career. Successful completion of this course and advanced animal science fulfills the transcribed credit requirements for NTC.

Prerequisite for Advanced Animal Science.

Advanced Animal Science-One Semester - .5 Credit



Open to Sophomores, Juniors, and Seniors

Advanced Animal Science is a continuation of animal science and will cover individual species in detail including dairy, beef, sheep, horses, swine, goats, companion animals, and exotic domesticated species. Animal physiology, behavior, biotechnology, veterinary medicine, and animal product selection will be emphasized. Current industry topics will be identified. Successful completion of this course and animal science fulfills the transcribed credit requirement for NTC.

Prerequisite: Animal Science or consent of instructor

Horticulture and Plant Science-One Semester - .5 Credit



Open to Freshmen, Sophomores, Juniors, and Seniors

Horticulture and Plant Science will introduce the various aspects of this very broad field. Many hands-on projects will acquaint the student with plant propagation and growth, indoor plants, landscaping, and gardening. Students will be growing plants in the newly constructed greenhouse and using the new head-house for lab experiments. Individual projects will include a terrarium, flower arrangements, houseplants, and school landscaping projects. Lab experiments will show the effect of environmental growth regulators, moisture, and growth media on plants. Suggested for those who enjoy growing plants and designing outdoor designs.

Greenhouse Management-One Semester - .5 Credit



This advanced course will help students further develop skills pertaining to plant propagation and landscaping. Students will be propagating plants in the newly constructed greenhouse. Projects planned include growing poinsettias and chrysanthemums. Many projects may include an individual landscaping plan and model as well as beginning floristry arrangements. A special emphasis will be on plant biotechnology and hydroponics.

Prerequisite: Horticulture and Plant Science or consent of instructor

Conservation and Natural Resources-One Semester - .5 Credit



Open to Freshmen, Sophomores, Juniors, and Seniors

Conservation of Natural Resources is designed to acquaint the student with the importance of managing our natural resources for future generations. Class will deal with current problems focusing upon soil and water conservation, forestry, pollution control, energy, water quality, waste disposal, and wildlife management. Lab exercises include water testing, soil testing, and various forestry measurements and identification. An ongoing project will be raising fish in an aquaculture tank.

Prerequisite: General Science I and II

Agribusiness Management and Marketing-One Semester - .5 Credit



Open to Juniors and Seniors

This advanced course deals with methods of doing business, agribusiness record keeping, budgeting, career planning, use of computers in agriculture, farm law, futures contracts, marketing distribution, promotion, pricing, advertising and government regulations. Each student will manage a farm or small business using a game simulation, invest \$10,000 in a computer simulation of the futures market, as well as participating in a nationwide Commodity Marketing Challenge.

Food Science Technology-One Semester - .5 Credit

As global population continues to grow, many young people and adults are unaware of how the world meets its most basic daily requirement...the need for food. Along the path from farm to consumer, the safety of our food can be affected at each step in our food delivery system. Food science benefits consumers every day with healthier diets, better tasting affordable foods, and increased food safety. In this class you really do get to play with your food! Topics covered in this course include the importance of food in our society, learning to interpret food labels, food microbiology, and chemistry of cooking, food physics and much more. Lab exercises will deal with processing food and testing various components of food. Projects include developing a new food product and a science cookbook.



BUSINESS EDUCATION



The goal of the Business Education Department at Marathon High School is to prepare students with knowledge about the business environment and to provide students with the necessary skills to succeed in the "real world." The skills of communication, teamwork, and critical thinking are what businesses are looking for today in employees - the classes offered in the business department work to develop these skills. Whether a student is planning to further their education or enter the world of work, there is a business class that will prepare them to succeed. The Business Department is also home of the School-to-Career Program and the student organization Future Business Leaders of America (FBLA) which gives students the opportunity to apply the skills they are learning in the classroom to everyday life.

COURSE DESCRIPTIONS

Accounting-Year Long– 1 Credit – students must take both A and B sections (Dual Credit for Juniors and Seniors)



Open to Sophomores, Juniors, and Seniors

Accounting provides an understanding of the basic elements and concepts of double entry accounting systems.

Accounting is the basis for any college career or where a major in business is concerned. Students will learn the accounting equation, the accounting cycle, journal entries, posting to different ledgers, end-of-period fiscal period reports, payroll systems, banking activities, taxes, uncollectible accounts, depreciation, inventories and notes and interest for various types of businesses including sole proprietorship and partnerships. Students will master the manual aspects of the accounting process and also complete accounting simulations and automated accounting work.

Advanced Accounting: Year Long – 1 Credit – students must take both A and B sections

Open to Juniors and Seniors

Accounting is the planning, keeping, analyzing, and interpreting of financial records for a particular business. This is an extension of Accounting. This course will examine in more detail the financial aspect of a business. This course will build on the knowledge gained in the Accounting I course and provide you with a solid understanding of corporate accounting practices. You'll be able to analyze transactions and prepare various corporate financial reports. You'll also gain practical experience working with Departmentalized Accounting, Accounting Control Systems, Accounting Adjustments, Management Accounting, and Cost Accounting. One accounting practice set will be done during this class.

If you are considering a business major of any kind in college or tech school, you will need to take Advanced Accounting.

This class will help prepare you for your college courses.

Prerequisite: Accounting

Business Issues and Communication: One Semester - .5 Credit (*offered as an English credit*)

Open to Freshmen, Sophomores, Juniors, and Seniors

Do you plan on going to college, technical school, and/or plan on communicating with others? If you answered yes (and everyone should have), then you should take this class, because in your future you will be working in groups, as individuals, and presenting information on a daily basis. As a student you need to start setting yourself apart from the pack. This means you need to develop skills that will prepare you for what employers are looking for in a leader: teamwork, problem solving, and communication skills. Individuals and groups will analyze information, make decisions, research current events related to business, and present information. Step out of your comfort zone and become more comfortable presenting information and taking leadership roles within a group. Every student taking this class will work to improve all aspects of verbal and non-verbal communication, written communication, and research skills while dealing with current business issues. This will be a fun and interactive class that will focus on the skills that will create the leader that businesses are looking for.

Computer Applications: One Semester - .5 Credit

Open to Freshmen, Sophomores, Juniors, and Seniors

Do you really know everything you need to know about using a computer? In the “real world” you will need to know more than how to play around on the Internet. In this class students will learn how to use the four main components of Microsoft: Word (word processing), Excel (spreadsheets), Access (database), and PowerPoint (presentations). All students will have to use these programs at some point in their life whether it is at school, work, or for personal use. This class will show students how to use these programs in an effective way, in “real life” scenarios.

Employability Skills-One Semester - .5 Credit (Dual Credit for Juniors and Seniors)



Open to Juniors and Seniors

This class is a must for any individual looking to gain an edge on the competition when looking for a job. Students will learn how to create a resume, cover letter, job application, reference page, and thank you letter. There will also be class time dedicated to interviewing skills in which students will take place in a mock interview. Students will also explore interests in their possible future occupations and will be given the opportunity to job shadow a work site of interest. Students will create an electronic career portfolio that focuses on a student’s past, present, and future successes. Up-to-date online technology will be used to develop the portfolio. This is a class that will benefit every student. It is strongly suggested that any student wishing to enroll in a School-To-Career program will have completed this class.

Financial Math-Year Long - 1 Credit students must take both A and B sections (*offered as an Math credit*)

Open to Juniors and Seniors

Financial Mathematics is a two-semester course where students learn to use mathematics effectively as a tool in their personal and business lives. After students have completed this course, they will be able to apply mathematical concepts in various personal and business situations. Students will apply mathematical concepts relating to: wages, tax statements, banking, credit cards, loans, insurance and investments, and budgets. Other mathematical skills that will be covered include: decimals, fractions, percents, and measurements. This course may be used to meet the mathematics requirements for graduation.

Hospitality Management-One Semester - .5 Credit (offered in 2016-2017, 2018-2019)

Open to Freshmen, Sophomores, Juniors, and Seniors

This course covers the growth and progress of the hospitality industry. Students will learn the concepts of the hospitality industry through a simulation focusing on running a hotel and a simulation focusing on running a restaurant. Topics covered in this class include: Pricing & Revenue Management, Group Sales, Public Relations, Customer Service, Social Media Feedback, Restaurant & Culinary Operations, Banquets & Meetings Operations, Financial Reports, Menu Design, amongst other Management and Marketing topics.

Prerequisite: Introduction to Business

Introduction to Business-One Semester - .5 Credit

Open to Freshmen, Sophomores, Juniors, and Seniors

This semester course is offered to students beginning at the Freshmen level to introduce them to the U.S. economic environment and characteristics of various types of business. This course includes additional topics like business and government in a global economy, technology in business, social and ethical issues and various other aspects of consumer issues relating to the business world. Students will also participate in a business community simulation and run their “own business.” This class is a prerequisite to Marketing, International Business, and Sports & Entertainment Management.

International Business-One Semester-.5 Credit (**offered in 2017-2018, 2019-2020**)

Open to Freshman, Sophomore, Juniors, and Seniors

We do not live in a regional or national marketplace, but in an International Market. We need to understand the importance of culture, social, and economic systems, and global business concepts and problems. We also need to know how our government encourages and discourages global business. This course will help you how the United States economy interacts and is effected by business conducted in other parts of the world.

Prerequisite: Introduction to Business

Computer App and Game Programming-One Semester .5 Credit

Open to Freshmen, Sophomores, Juniors, and Seniors

This course will concentrate on building students computational thinking skills and learning the basics of programming. This class will touch upon many new and exciting programming websites and programs. Topics in programming that will be covered in the class include: Drag and Click/Building Block Programming, Building Apps for an Android Phone, Developing Computer Video Games, and JavaScript. This is a student driven class, therefore, topics can change based on student interest.

Marketing -One Semester-.5 Credit (Dual Credit for Juniors and Seniors)



Open to Freshman, Sophomore, Juniors, and Seniors

Marketing is one of the fastest growing employment areas in the nation. We will study the four P's of marketing, the marketing concept, and marketing functions. Marketing is a major field of study at the technical college as well as the university level. This is a project-based class as students will develop advertisements, marketing campaigns, and a marketing plan. This course will expose students to various career opportunities in marketing and help develop an understanding of marketing in both profit and nonprofit organizations. Marketing careers cover many areas: advertising, buyers, flight attendants, hotels, banking, financial services, insurance, retail sales, real estate and tourism.

Prerequisite: Introduction to Business

Personal Finance - One Semester - .5 Credit

Open to Juniors, and Seniors

Who wants to be a millionaire? Well, maybe not a millionaire, but at least you will be able to control your financial future by making sound decisions. No other course in the curriculum is more relevant to students or more deeply rooted in the real world than consumer and personal finance education. Personal Finance enables students to understand enough economics to make reasoned judgments about the economic issues and policies that students will face as members of a democratic society. Students will use a computer simulation to find a job, budget and save, find an apartment, buy a car, shop, choose and balance a checking account, get a credit card, fix your credit, use online banking, pay your taxes, intro to investing, risk v. return, diversification, investing for retirement, buying a home, and insurance.

Sports and Entertainment Management-One Semester - .5 Credit

Open to Sophomores, Juniors and Seniors

Ever dream of owning your own business or sports franchise? In this class students will use a computer simulation to run a professional football franchise. While running the simulation students will have to choose the best city to start a franchise in, market the franchise, obtain sponsorships, set ticket prices, staff all areas of the business, choose the correct promotions week-to-week, and earn a profit. The final week of the course students will compete against each other to see which owner can earn the most profit and have a winning season. Other management topics that will be covered in the course include: leadership, finance, product management, people management, information management, and legal and ethical issues. Lectures are pre-recorded which allows more class time for discussion and time to work on assignments and projects. This would be a great choice for any student (not just guys interested in football) considering business as a career or for any student looking for the challenge of running a simulated business.

Prerequisite: Introduction to Business

Webpage Design-One Semester-.5 Credit

Open to Freshmen, Sophomores, Juniors, and Seniors

Have some fun and use your creativity designing web pages using Dreamweaver—web page design software. Students will have an opportunity to create web pages of their choice as well as for mock businesses that the student chooses. Students will also learn how to use a graphics program, Fireworks, which is used to create and edit sophisticated images for the Web. This class will teach students how to create a page that a user will want to read and also how to present the information the user is looking for.

School-To-Career I and II-One Semester - .5 Credit

Open to Juniors and Seniors

Have a job or looking for one and want to earn some school credit as well as possibly earning a state certified certificate. If so, then this is what you are looking for. It is the objective of the Marathon School District to provide the education and training necessary to develop the potential of every student to become competent, contributing members of the community. This is to be accomplished by strengthening educational, vocational, and life skills, while learning how to set and attain goals to assure success in our ever-changing world. Students who enroll in this course must have a good attendance and behavior record at school. It is not required that a student leave school during the day to participate in the program. It is recommended that students take a class that relates to the task being completed at the worksite. The following programs are available for students that would like to gain valuable work experience:

Youth Apprenticeship (1-2 Years– juniors and seniors); Employability Skills (1 Semester up to 1 Year-seniors only); Co-op (1 Year-seniors only), Teacher Aiding. See Mr. Winkler with any questions about the programs.

Strongly suggest taking Employability Skills prior to enrolling in the School-to-Career program.

DRIVERS EDUCATION TRAFFIC SAFETY EDUCATION

DEPARTMENT INFORMATION

Learning to drive safely is a responsibility we must assume not only for ourselves but for passengers in our car as well as for other roadway users. This is a nine week course that is offered during the first quarter of each school year as well as during the summer school program.

Driver Education Behind-the-Wheel must be taken privately.

COURSE DESCRIPTIONS:

Traffic Safety-Classroom-This class is offered as a summer school class that runs around 3 weeks in June and July for 2 hours a day. This class is also offered once during the school year in the fall, the first nine weeks of first semester.

The main objective of this course is accident prevention through study in detail of the following:

1. The Driving Task
2. Responsibilities of Driving
3. Controlling a Vehicle and Sharing the Road
4. Driving in Various Environments

Students/Parents are required to organize their own behind-the-wheel training.

ENGINEERING EDUCATION



DEPARTMENT INFORMATION

Project Lead The Way (PLTW) is a rigorous and innovative Science, Technology, Engineering, and Mathematics (STEM) education curricular programs used in middle and high schools across the U.S. STEM education is at the heart of today's high-tech, high-skill global economy. For America to remain economically competitive, our next generation of leaders – the students of today – must develop the critical-reasoning and problem-solving skills that will help make them the most productive in the world.

STEM education programs like the one offered by PLTW engage students in activities, projects, and problem-based (APPB) learning, which provides hands-on classroom experiences. Students create, design, build, discover, collaborate and solve problems while applying what they learn in math and science. PLTW's comprehensive curriculum for engineering has been collaboratively designed by PLTW teachers, university educators, engineering and biomedical professionals and school administrators to promote critical thinking, creativity, innovation and real-world problem solving skills in students.

Project Lead the Way (PLTW)

- Principles of Engineering
- Digital Electronics
- Introduction to Engineering and Design
- Engineering Design and Development

COURSE DESCRIPTIONS:

Introduction to Engineering and Design – Year Long – 1 Credit students must take both A and B sections

In this course students will learn basic engineering concepts. Students will study 4 units in this course all of which contain a different major concept. Some of those concepts that we will be taking a look at include: employment within the engineering career, communication, design process, sketching, and three-dimensional modeling. The students will also get a chance to design a puzzle cube, a train engine with their own designed train car and reverse engineer a selected product using AutoDesk Inventor software.

Principles of Engineering – Year Long – 1 Credit students must take both A and B sections

This course exposes students to some of the major concepts that they will encounter in a postsecondary engineering course of study. Students have an opportunity to investigate engineering and/or high tech career. POE gives students the opportunity to develop skills and understanding of course concepts through activity-, project-, and problem-based (APPB) learning. Used in combination with a teaming approach, APPB learning challenges students to continually hone their interpersonal skills, creative abilities, and problem-solving skills based upon engineering concepts. It also allows students to develop strategies to enable and direct their own learning, which is the ultimate goal of education.

*Need to take IED. Recommended for Juniors and Seniors. Sophomores may join with Instructor Approval.

Digital Electronics - Year Long – 1 Credit students must take both A and B sections

Unit 1 Direct Current Circuit Analysis. Units and conversion, resistors, circuit fundamentals, schematics, Ohm's Law, series circuits, parallel circuits, series-parallel circuits, test instruments and usage, troubleshooting, voltage dividers, switches and other controls. Unit 2: Alternating Current Circuit Analysis. Inductance, capacitance, inductive reactance, capacitive reactance, RCL circuits, resonant circuits, Meters and instruments, oscilloscope operation and analysis of waveforms. Unit 3: Semiconductors, Semiconductor fundamentals, diodes, silicon controlled rectifiers, triacs, junction transistors, field effect transistors, amplifiers, power supplies, and voltage regulation. Unit 4: Digital Circuits. Logic gates, integrated circuits, combinational logic circuits, sequential logic circuits, timer circuits, flip flops, counters, adders.

Engineering Design and Development - Year Long – 1 Credit students must take both A and B sections

The knowledge and skills students acquire throughout PLTW Engineering come together in EDD as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing EDD ready to take on any post-secondary program or career. *Need to take IED & POE.

ENGLISH DEPARTMENT



Marathon High School's English Department provides a high-quality curriculum based on rigorous standards. Students will speak and write extensively in all courses, responding to reading and presenting research. The curriculum focus is on developing an extensive vocabulary and improving students written and oral language skills, with the goal of preparing students to meet college and career readiness expectations. The Department emphasizes that instruction in reading, writing, speaking, listening, and language is spiraled throughout grade levels and is a shared responsibility with the school. Ultimately, the English Department curriculum strives to provide students with educational opportunities to meet National Common Core Standards as follows:

- Demonstrate Independence
- Building strong content knowledge
- Refine and share knowledge through writing and speaking
- Comprehend as well as critique
- Value evidence
- Understand other perspectives and cultures

Language Arts Curriculum Scope and Sequence

9th Grade English 9 (required)

10th Grade English 10 (required)

11th Grade Semester 1 Semester 2
English 11 A (required) English 11 B (required)
AP English 11

12th Grade Semester 1 Semester 2
English 12 A (required) English 12 B (required)

Business Issues and Communication

*Students are required to successfully complete each grade level for semesters one and two before advancing to the next grade level course.

COURSE DESCRIPTIONS:

English 9-required, year-long course

Students will develop basic skills in reading, writing, speaking, listening, and viewing, with an emphasis on vocabulary development, literary devices, expository writing, grammar, usage, and mechanics. Integrated, theme-centered units include short stories, novels, plays, poetry, and non-fiction. Writing workshops emphasize the writing process in composing expository, narrative, and descriptive essays. Students are required to teach grade-level proficiency in basic, language art skills.

English 10-required, year-long course

Students will study the writers and major themes that represent the culture and ideas of the American people. The focus is on the process by which American Literature has developed and matured from the eighteenth through the twenty-first centuries. Students will analyze a selection of American Literature: both non-fiction (essays and narratives) and fiction (poetry, short stories, drama, and a minimum of four novels). In addition, they will engage in extensive vocabulary development, essay writing and oral presentation activities to demonstrate grade-appropriate proficiency in the five basic skills of reading, writing, speaking, listening, and viewing.

English 11 A-required Semester 1

“Students will collaborate to become self-directed learners as they read and respond to foster a deeper understanding of the human experience.” In this semester students will be focusing on:

- Reading and Responding to Narrative Texts
- Writing Informative / Explanatory Essays
- Reading and Responding to Informative Texts
- Reading Timeless Tragedies
- Analyzing Text with Themes that Transcend Time
- Inquire to Promote Social Awareness of Contemporary Issues

English 11 B-required Semester 2

“Students will collaborate to collect, analyze, and cite specific evidence to formulate questions, construct arguments, make decisions, and change thinking”. In this semester, we will be focusing on:

Contemporary Issues in Literature
Connecting Contemporary Issues to the Constitution
The U.S. Constitution: Influencing Contemporary Change
Reading Fictionalized Memoirs / Biography
Writing Fictionalized Memoir / Biography

English 12 A-required Semester 1

“Students will become self directed learners using a variety of thinking strategies to analyze, understand, and create text for personal enrichment, inquiry, and problem solving.” In this semester we will be focusing on”

Reading and Responding to Narrative Texts
Writing Informative / Explanatory Essays
Reading and Responding to Informational Texts
Two Stages / One Theme
Gathering and Analyzing Texts with Themes that Transcend Time
Inquiry Promotes Social Awareness of Current Events

English 12 B-required Semester 2

“Students will become self-directed learners who obtain, analyze, and synthesize information from a variety of resources to express information, change perspectives, clarify thinking, and make informed decisions.” In this semester, students will be focusing on:

Timeless Topics in Literature
Connecting Timeless Topics to the Constitution
The U.S. Constitution: The Core of Change
Reading Science Fiction
Writing Science Fiction

Advanced Independent Study course for 11th and 12th grade levels are available at the instructor’s discretion and with the Department’s approval.

NOTE: Quoted material and bulleted lists of tasks/assessments are taken from the National Common Core Standards.

Business Issues and Communication: One Semester - .5 Credit (*offered as an English credit*)

Open to Freshmen, Sophomores, Juniors, and Seniors

Do you plan on going to college, technical school, and/or plan on communicating with others? If you answered yes (and everyone should have), then you should take this class, because in your future you will be working in groups, as individuals, and presenting information on a daily basis. As a student you need to start setting yourself apart from the pack. This means you need to develop skills that will prepare you for what employers are looking for in a leader: teamwork, problem solving, and communication skills. Individuals and groups will analyze information, make decisions, research current events related to business, and present information. Step out of your comfort zone and become more comfortable presenting information and taking leadership roles within a group. Every student taking this class will work to improve all aspects of verbal and non-verbal communication, written communication, and research skills while dealing with current business issues. This will be a fun and interactive class that will focus on the skills that will create the leader that businesses are looking for.

AP English 11: Year Long-.5 Credit Literature and .5 Credit Writing

Students should discuss this class with English Staff and Counselor to see if it is a good fit for them.

Advanced Placement English 11 is a full-year, college-level English class for students gifted with superior aptitude for interpreting literature, writing about literature, and discussion perceptions, meaning, structure, and language. Students enrolled in AP English 11 are encouraged to take the College Board Advanced Placement exam in the spring, which may qualify them for college credit. The exam is not mandatory. Summer reading is required. This course must be taken as a full-year course

MATHEMATICS



DEPARTMENT INFORMATION:

The study of mathematics is an integral part of one's education regardless of career aspirations. Logic, analysis, and problem solving are a few of the key skills students develop through the study of math. The mathematics curriculum is based on state guidelines. Three credits are required for graduation. Marathon High School offers a varied program by which students may meet these requirements. Our program also provides the appropriate courses to meet the needs of each student. Students are given a choice of courses which provide for college preparation as well as courses which help to provide the basic skills for coping with everyday situations.

A graphing calculator is required for precalculus, calculus and statistics (TI-83, 84 or equivalent).

COURSE DESCRIPTIONS:

Pre-Algebra-Year long -- 1 Credit--students must take both A and B sections

Open to freshmen, sophomores, juniors and seniors

Pre-Algebra reinforces arithmetic skills, developing the pre-algebra concepts of variable recognition, signed numbers, formulas, and single variable equations. Students will be introduced to algebraic symbolism, simplifying expressions, solutions to elementary equations, and the graphic representations associated with variables.

Algebra I-Year long – 1 Credit – students must take both A and B sections

Open to freshmen, sophomores, juniors and seniors

Algebra I is primarily for freshmen, but may be taken by upperclassmen. The curriculum includes the topics of the language of algebra, the real number system, polynomials, factoring, algebraic fractions and functions, systems of equations, quadratic equations, and the solution of equations and inequalities.

Geometry – Year long – 1 Credit – students must take both A and B sections

Open to Freshmen, Sophomores, Juniors and Seniors

This course develops principles of logical reasoning through the study of geometric figures, diagrams, and relationships. Algebraic and graphical problem-solving methods are applied to such topics as triangles, parallel and perpendicular lines, proofs, and constructions. Two and three dimensional geometric figures are studied. Algebraic and graphical problem-solving methods are applied to such topics as quadrilaterals, circles, area, volume, and trigonometry.

Prerequisite: Algebra I or placement test with approval of instructor

Algebra II – Year long – 1 credit – students must take both A and B sections

Open to Freshmen, Sophomores, Juniors, and Seniors

The purpose of Algebra II is to reinforce and expand on the concepts of Algebra I. Topics to be covered are open sentences in one variable, systems of linear open sentences, polynomials and factoring, and rational expressions, topics of relations and functions, irrational numbers and quadratic equations, quadratic relations and functions, exponential functions and logarithms, and matrices and determinants.

Prerequisite: Algebra I

Prerequisite: Completion of Algebra I

Statistics – One Semester - .5 Credit

Open To Sophomores, Juniors and Seniors

This course develops principles of data analysis and probability. Descriptive and inferential statistical methods are investigated along with elements of probability. Algebraic and graphical problem solving techniques are applied to data sets and probability situations. Statistical procedures involving interpretation, prediction, and modeling are studied.

RECOMMENDATION: A graphing calculator is required for statistics (TI-83, 84 or equivalent).

Prerequisite: Completion of Algebra

Pre-Calculus – Year Long – 1 Credit – students must take both A and B sections

Open to Juniors and Seniors having a passing grade in Algebra II

Pre-calculus is offered to students who plan to enter technical fields such as engineering, science, research, and mathematics. The course reviews many Algebra II topics in greater depth with emphasis on graphing and solving linear and higher order equations, systems and inequalities. Other topics include conic sections, logarithmic functions, inverse relationships and the complex number system. The second semester of Pre-Calculus serves as a complete course in introductory trigonometry with attention given to many other topics including polar coordinates, limits, sequences, series, and matrices. A graphing calculator is required for Pre-Calculus (Ti83, 84, or equivalent).

A.P. Calculus AB– Year long – 1 Credit – students must take both A and B sections

Calculus is intended for students planning to enter highly technical fields such as math, science, and engineering. The course will give an introduction to the field of Calculus with a focus placed on limits, derivatives and integrals. A passing grade in Pre-calculus B is required to enroll in Calculus. A graphing calculator is required for Calculus (TI 83,84 or equivalent). A primary focus of the second semester will be preparation for the Advanced Placement Calculus AB exam, which will be offered in May. A passing grade in the first semester is required to enroll in the second semester.

Financial Math-Year Long - 1 Credit students must take both A and B sections (*offered as an Math credit*)

Open to Juniors and Seniors

Financial Mathematics is a two-semester course where students learn to use mathematics effectively as a tool in their personal and business lives. After students have completed this course, they will be able to apply mathematical concepts in various personal and business situations. Students will apply mathematical concepts relating to: wages, tax statements, banking, credit cards, loans, insurance and investments, and budgets. Other mathematical skills that will be covered include: decimals, fractions, percents, and measurements. This course may be used to meet the mathematics requirements for graduation.



MUSIC EDUCATION

DEPARTMENT INFORMATION:

Band and choir are yearlong courses that provide students an outlet for many life skills, creativity, divergent thinking, critical thinking, and in the process enhancing their musical abilities. The students will also enhance their other subject areas they are currently partaking in, science, math, language, etc. While taking these courses the student will be challenged and tested to perform in front of peers and other audience members. This will assist them in their future to become confident in public speaking or directing a group. These music courses will offer many extra out of school activities throughout the year that can be life experiences and may spark new ideas to challenge and engage students in a different approach.

COURSE DESCRIPTIONS:

Band-Year long-1 credit, students must take both A and B sections

Band is open to students grade 9-12 with or without previous instruction in playing band instruments. Band is geared towards music performance in many different areas- as a group, small groups or individually. Students will learn performance techniques on their specific instrument as well music theory and history as applied to pieces studied. Students who take band are expected to play in concert band, marching band, and pep band. Lessons and solo and ensemble performance are also required. ATTENDANCE AT ALL PERFORMANCES IS MANDATORY.

Concert Choir-Year long-1 credit, students may take one or both sections.

Concert choir is a course open to all grades 9-12 with or without previous instruction in singing. Choir is a course that offers opportunities for students to be creative, think critically, learn new languages, be engaging, perform in front of strangers, and enjoy singing with their peers. This course will have many performances throughout the year. Of these performances the choir will host two major concerts every year that will alternate, the variety show and a musical. ATTENDANCE AT ALL PERFORMANCES IS MANDATORY! This course will offer different styles literature throughout the year and the selections will be of varied skill levels. Solo and ensemble is optional, however large group is mandatory.

Vocal Jazz-Year long-.25 credits each semester

Vocal Jazz is open to all grades 9-12 with instruction in singing or previous consent by the director. This course provides a musical outlet for students who excel in singing and have an interest in becoming a better musician or performer. Students in this group are expected to be at all practices and performances throughout the year. This group will perform at all the Concert choir concerts. Vocal Jazz will have opportunities to perform on its own for various events or school functions that arise.

This class meets before school on Wednesday's and Friday's.

Music Appreciation-One Semester- .5 credit

The Music Appreciation class is intended to give students a basic understanding of the history of music, including these style periods: Medieval, Renaissance, Baroque, Classical, Romantic, and Twentieth Century. The Twentieth Century unit will cover Rock, Jazz, Electronic, and other modern forms of music. The emphasis will be on listening to examples of each of these styles of music, and the identification of titles, composers, timbres, forms, and styles. This is a one semester academic course open to all students. No experience in music is necessary and students do not have to be in band or chorus to participate in Music Appreciation. This course is offered every other year and no prerequisites are required.

PHYSICAL EDUCATION



DEPARTMENT INFORMATION:

One of the goals in physical education is to improve the four components elements of physical fitness, which includes Muscular Endurance, Muscular Strength, Cardiovascular Endurance, and Body Mass Composition. Of paramount importance, is giving the student an understanding of how beneficial physical education can be to one's body now and how it can help in the future. By introducing students to the multi-dimensional approach of physical education through team, individual, and lifetime activities we hope to accomplish these objectives for the future. Students are required to have Health class in grades 7-12. Locally this requirement is met in the middle schools.

To assist in planning a program the following requirements exist for physical education:

Freshman - Freshman P.E. Juniors - Junior PE Sophomores - Sophomore PE Seniors - As an elective class

COURSE DESCRIPTIONS:

Freshman Physical Education-1 Semester

This is a required class for Freshmen and will be taken 1st or 2nd semester.. The students will be covering the four components of Physical Education-Muscular Endurance, Muscular Strength, Cardiovascular Endurance, and Body Mass Composition. The students will learn how these four components of Physical Education help develop and maintain a persons health. The students will use pedometers, body mass charts, body mass measuring devices, Insta-Pulse sticks along with other health items to measure their health. Units will include the following-Flicker Ball, Ultimate Frisbee, Hand Soccer, Capture the Flag, Jungle Volleyball, Badminton, Basketball, Floor Hockey, Snowshoeing, Softball, Bean Bag Toss, Bocce Ball, Weight Training and Swimming. Other units may be added.

Sophomore Physical Education-1 Semester

Sophomore Physical Education-This class is required for all Sophomores. The students will be covering the four components of Physical Education-Muscular Endurance, Muscular Strength, Cardiovascular Endurance, and Body Mass Composition. The students will learn how these four components of Physical Education help develop and maintain a persons health. The students will use pedometers, body mass charts, body mass measuring devices, Insta-Pulse sticks along with other health items to measure their health. Units will include the following-Flicker Ball, Ultimate Frisbee, Hand Soccer, Capture the Flag, Jungle Volleyball, Badminton, Basketball, Floor Hockey, Snowshoeing, Softball, Bean Bag Toss, Bocce Ball, Weight Training and Swimming. Other units may be added.

Junior Physical Education-1 Semester

All Juniors are required to take this class. The students will be covering the four components of Physical Education-Muscular Endurance, Muscular Strength, Cardiovascular Endurance, and Body Mass Composition. The students will learn how these four components of Physical Education help develop and maintain a persons health. The students will use pedometers, body mass charts, body mass measuring devices, Insta Pulse sticks along with other health items to measure their health. Units will include the following-Flicker Ball, Ultimate Frisbee, Hand Soccer, Capture the Flag, Jungle Volleyball, Badminton, Basketball, Floor Hockey, Snowshoeing, Softball, Beanbag Toss, Bocce Ball, Weight Training and Swimming. Other units may be added.

Elective Phy-Ed-1 Semester

Elective Physical Education-One semester. This class is for any student who wants to fill an elective with a Physical Education class. The students will be covering the four components of Physical Education-Muscular Endurance, Muscular Strength, Cardiovascular Endurance, and Body Mass Composition. The students will learn how these four components of Physical Education help develop and maintain a persons health. The students will use pedometers, body mass charts, body mass measuring devices, Insta-Pulse sticks along with other health items to measure their health. Units will include the following-Flicker Ball, Ultimate Frisbee, Hand Soccer, Capture the Flag, Jungle Volleyball, Badminton, Basketball, Floor Hockey, Snowshoeing, Softball, Bean Bag Toss, Bocce Ball, Weight Training and Swimming. Other units may be added

SCIENCE



DEPARTMENT INFORMATION:

One writer has described science as "the literature of truth." Surely no other endeavor has had as great an impact upon man as has science and no other body of knowledge is growing as fast.

Some goals that we feel will be gained by students taking biological and physical science are: an appreciation of science, the development of scientific literacy, the facility to gather data, interpret the meaning of data, and the ability to draw conclusions, to learn to use and manipulate science equipment and to develop an understanding of the natural laws and principles that govern how the biological and physical world behaves.

Two credits of science must be successfully completed. Specifically, students must complete 2 semesters of physical science (General Science A and B) and 2 semesters of Biology (General Biology A and B or BSCS Biology I A and B).

COURSE DESCRIPTIONS:

General Science -Year long-.5 credit students must take both A and B sections

This course deals with matter and energy. It sets the stage for future courses in biology, chemistry, and physics. Lab work, with data gatherings and interpretation is stressed throughout the course. The nature of science, measurement, elements, basic chemistry and organic chemistry, and solutions, forces, work, energy and beginning physics. This course is required of all freshman.

General Biology- Year long-.5 credit students must take both A and B sections

This course is open to students in the 10th,11th or 12th grade, however, the sophomore year is the recommended year. Course work is the same as Biology, material is just covered at a slightly slower pace and not as in-depth.

Biology-Year long-.5 credit students must take both A and B sections

This course is open to students in the 10-11-12th grade, however, the sophomore year is the recommended year. Laboratory oriented, these classes rely on the use of scientific methods for problem solving. The major components are as follows:

1. Cell structure and function
2. Genetics/inheritance
3. Survey of the 5 kingdoms
4. Ecological and energy relationships

Advanced Biology-Year long-.5 credit students must take both A and B sections

Advance Biology is designed primarily for juniors and seniors who are interested in exploring the areas of biology in more detail. The class is designed for those who plan to attend college, especially for those contemplating entering fields of science or medicine. Topics covered will include Botany, Microbiology, Biotechnology, selected areas of human anatomy and physiology, and environmental awareness.

Chemistry-Year long-.5 credit students must take both A and B sections

Open to Juniors, and Seniors (Sophomores with consent of instructor)

This course deals with the nature of matter, its classification, make up and changes. It involves laboratory work and the student should have at least one year of algebra. Specific topics deal with writing and balancing equations, atomic structure, the Periodic Table, chemical bonding, solids, and liquids. In the second semester specific topics include crystals, gases, solutions, reaction rate, and chemical equilibrium;

Advanced Chemistry-Year long-.5 credit students must take both A and B sections

This course will be a more in-depth study of inorganic chemistry, with the emphasis being placed on hands on laboratory activities. The student must have had a B- or better in Chemistry or the instructor's consent. Students will learn through a variety of college level laboratory activities and work with fire based activities that include flame testing and electron ejection.

Physics – Year long - .5 Credit – students must take both A and B sections

Open to Juniors and Seniors

Physics is a study of energy. It will have units based upon motion, forces, energy, fluid mechanics, sound, and circular motion, study of wave motion as it relates to sound and light, and units on electricity. It will include a variety of hands-on activities with an occasional trip outside. Anyone seeking engineering majors, or any other science field should do their utmost to be in this class. It will be math based. Physics will also have group activities such as the ever popular Rube-Goldberg machine. This machine is a larger “gadget” that performs an easy task, in a fun way.

Prerequisites: Completion of Geometry and be in second year Algebra

AP Physics – Year long - .5 credit – students must take both A and B sections

This year long class may be available. If interested speak to guidance counselor.

Digital Electronics-5 credit students must take both A and B sections

This class is part of the Project Lead the Way curriculum. This class will cover the following items:

Unit 1: Direct Current Circuit Analysis. Units and conversion, resistors, circuit fundamentals, schematics, Ohm's Law, series circuits, parallel circuits, series-parallel circuits, test instruments and usage, troubleshooting, voltage dividers, switches and other controls.

Unit 2: Alternating Current Circuit Analysis. Inductance, capacitance, inductive reactance, capacitive reactance, RCL circuits, resonant circuits, Meters and instruments, oscilloscope operation and analysis of waveforms.

Unit 3: Semiconductors. Semiconductor fundamentals, diodes, silicon controlled rectifiers, triacs, junction transistors, field effect transistors, amplifiers, power supplies, and voltage regulation.

Unit 4: Digital Circuits. Logic gates, integrated circuits, combinational logic circuits, sequential logic circuits, timer circuits, flip flops, counters, adders.

Integrated Science-5 credit students may take A or B sections(semesters) or both

Open to Juniors and Seniors

Integrated science will be a theme taught such that all three science disciplines will be on display, meeting many if not all of the HS.PS standards. The class will use 8 themes that will use life science, physical science and earth science principles. It will be open to all juniors and seniors seeking a 5th and/or 6th semester of science. The class will have a variety of hands on activities as well as being project based to engage all types of learners.



SOCIAL STUDIES



DEPARTMENT INFORMATION:

The major objectives of this department are to help students become more aware of the evolution of different cultures, their rights and responsibilities as citizens in a modern society, and how their interaction with others can make the world a better place to live in.

All students must earn 3 credits in social studies. One credit must be taken in U.S. History (American History to 1877); American History (Reconstruction to the present) and the course in American government. The other three classes may be selected from available electives.

FOUR-YEAR COLLEGE PREPARATORY SOCIAL STUDIES CURRICULUM

The following is the suggested sequence of Social Studies classes a student planning on going to a 4 year college after high school should take to meet the minimum requirements to graduate from Marathon High School and prepare them for college level work. All classes are .50 credits.

REQUIRED CLASSES: Must take all three.

U.S. History: The Great Wars - 9th

U.S. History: World Superpower - 9th

American Government – 10th, 11th or 12th

ELECTIVE CLASSES: Must choose three.

Area Studies - 9th or 10th

Great Civilizations - 9th, 10th, 11th, or 12th

Consumer Economics – 11th or 12th

A.P. American Government - 11th or 12th

European History - 10th, 11th, or 12th

Intro to Law - 11th or 12th

Social Problems - 11th or 12th

Vietnam - 11th or 12th

World War II - 11th or 12th

COURSE DESCRIPTIONS:

U.S. History: The Great Wars-One Semester- .5 credit

Open to Freshmen and Sophomores

Investigate changes in American society brought on by immigration, the Industrial Age, and the Great Depression, as well as the government's response to these hardships on its citizens. Study the military and diplomatic philosophies behind imperialism and the creation of an American empire. Scrutinize the circumstances behind the start of both wars and the United States entry into both conflicts, along with the concords that concluded these disputes.

U.S. History: World Superpower-One Semester- .5 credit

Open to Freshmen and sophomores

Witness the contemporary events that have shaped the world you live in. Examine the causes behind the Cold War and the various conflicts spawned by this battle of ideologies from: Korea, Vietnam, and Afghanistan. Domestically, examine the Civil Rights Movement and the great leaders within it, the peace movement of the 60's, and the mistrust of government created by the Watergate scandal of the 70's. The latter units of this course prompt you to analyze the political and social events of your own lifetime and consider how they have influenced current events.

American Government-One Semester- .5 credit

Open to Sophomores, Juniors, and Seniors

This course acquaints students with national, state and local government. The philosophical foundation of our system of government is studied, as well as the Constitution and each branch of the national government. Other topics include political parties and elections, and civil rights and liberties. Students are encouraged to be well-informed on current events and political issues. This course is required for graduation.

Great Civilizations-One Semester- .5 credit

Open to Freshmen, Sophomores, Juniors, Seniors

Investigate the development of the earliest civilizations in Mesopotamia and the Indus and Yangtze River Valleys. Explore key contributions made to Western civilization by the Mediterranean Civilizations of Greece and Rome. Examine the impact on Eastern and Western civilizations made by such religions and philosophies as: Hinduism, Buddhism, Taoism, Confucianism, Judaism, Christianity, Zoroaster, and Islam, as well as the effects they have on the world views of their followers.

European History-One Semester- .5 credit

Open to Sophomores, Juniors, and Seniors

Study European history from the Middle Ages through the Age of Imperialism. Investigate the impact of actions taken during the Crusades and the Inquisition. Study the growth of learning and experimentation in the arts and sciences during the Renaissance. Evaluate the variances in political philosophy that evolved during the Enlightenment and Industrial Revolution. Determine the precipitators of imperialism and European domination of the world, as well as the movements that arose to end it.

Consumer Economics-One Semester- .5 credit

Open to Juniors and Seniors

Economics directly affects everyone. Understanding the interrelationship between individual economic decision making and the operation of the economy as a whole is essential to functioning effectively in our economic system. Fundamental economic principles, micro-and macro-economic concepts, and international economic concepts are studied. Specific topics include the functioning of markets, the role of government, monetary policy, taxes and fiscal policy, and measuring economic growth.

Social Problems-One Semester- .5 credit

Open to Sophomores, Juniors, and Seniors

Methods of social science research are learned and applied to problems of contemporary American society and the global community. Social problems such as demographic change, poverty, crime and deviance, and changing social institutions are examined from a sociological perspective.

Introduction to Law-One Semester- .5 credit

Open to Sophomores, Juniors, and Seniors

The historical origins and the development of our justice system and its institutions are examined. Civil and criminal justice topics are studied, including civil litigation, contract law, family law, criminal procedure, law enforcement and corrections. It is recommended that American Government be taken first.

Area Studies-One Semester- .5 credit

Open to Freshmen, and Sophomores

The five themes of geography are location, place, interaction between people and their environment, movement, and region. These themes are applied to study the unique physical and human characteristics of various culture regions of the world: Western Europe, Eastern Europe, the Middle East and North Africa, Latin America, and Asia. The issue of globalization is also examined.

Vietnam-One Semester- .5 credit

For Juniors and Seniors

The Vietnam War has had a tremendous impact on our nation. From our citizens, to our universities, to our military, and to our government, none emerged the same from this turbulent event. This war was called the “first televised war” because of the breadth of the correspondents who covered it and the depth of our nation’s involvement in watching the nightly news to get the latest information. This course is intended to help a student who wasn’t even born when the last American helicopter took off from Saigon understand why people say “I hope it’s not another Vietnam.” The student will learn how we became involved in Vietnam, what American policies were, what life was like for the military in Vietnam, what was happening on the home front, the cultural changes which occurred in the United States and Wisconsin and finally, the consequences and lessons of war. There will be extensive reading, research, and projects for the course in addition to analysis of films and television clips.

Prerequisites: ‘B’ average in social studies courses with a letter of reference submitted by a social studies teacher.

World War II-One Semester- .5 credit

For Juniors and Seniors

Very few wars can be defined in terms of “good vs. evil”. World War II is one such war. The global conflict from 1939 to 1945 shook the world and had lasting reverberations that we are dealing with to this day. It was the most widespread (fought across 6 of the 7 continents), costly, and destructive war in the history of the planet. Guided reading assignments – along with research studies and class projects – will take students from Hitler’s rise to power in 1933 to the surrender of the Japanese in 1945. Students will delve into a host of topics along the way including: * Major foreign and domestic events of WWI (E.g., Battle of the Bulge, the Holocaust, Okinawa, Iwo Jima, Hiroshima, Normandy, D-Day, & Pearl Harbor) * Axis and Allied powers *Life Under German occupation * Technological advancements * The role of women during the war * Espionage and war crimes * Cultural stereotypes (then and now). Actual historical documents, diaries/ memoirs, newspaper accounts, propaganda pieces and films about World War II will be examined, as well as their relative credibility as a source.

Prerequisite(s) “B” average in social studies courses, with a letter of reference submitted by a social studies teacher.

AP U.S. Government and Politics-One Semester- .5 credit

The purpose of this class is to prepare the student to take the Advanced Placement exam for US Government and Politics.

In order to be successful, students must be able to analyze and evaluate the institutions, principles, beliefs, and groups that constitute our political system. Students may qualify for 3 college credits in Political Science, based on the AP exam results. It is recommended that American Government be taken before the AP Course.



TECHNOLOGY EDUCATION



DEPARTMENT INFORMATION:

Technology and Engineering Education fosters the development of a strong foundation in technical skills, consumer knowledge, the planning, producing, testing, servicing, and evaluation of consumer and industrial goods, and the development of the ability to relate to a rapidly changing technological world.

Manufacturing/Construction/ Materials and Processes

Manufacturing
Woods I
Woods II
Woods III
Metals I
Metals II
Metals III
Digital Electronics (year-long)
Small Engines
House Wiring
Photoshop Applications in Tech ED
Intro to Drafting
Architectural Drafting

Project Lead the Way (PLTW) Engineering

Introduction to Engineering (year-long)
Principles of Engineering ((year-long)
Engineering Design and Development (year-long)
Digital Electronics (year-long)

COURSE DESCRIPTIONS:

Architectural Drafting - One Semester - .5 credit



Open to Juniors and Seniors

***2 NTC CREDITS CAN BE EARNED UPON SUCCESSFUL COMPLETION**

This class builds on the knowledge gained in the Intro to Drafting course. Students will increase their AutoCAD speed, skills, and accuracy by creating prints used in house plans. Through this experience, students will also gain knowledge about building codes and designing homes with both form and function.

*Intro to Drafting Required

Digital Electronics - Year Long – 1 Credit students must take both A and B sections

Unit 1 Direct Current Circuit Analysis. Units and conversion, resistors, circuit fundamentals, schematics, Ohm's Law, series circuits, parallel circuits, series-parallel circuits, test instruments and usage, troubleshooting, voltage dividers, switches and other controls. Unit 2: Alternating Current Circuit Analysis. Inductance, capacitance, inductive reactance, capacitive reactance, RCL circuits, resonant circuits, Meters and instruments, oscilloscope operation and analysis of waveforms. Unit 3: Semiconductors, Semiconductor fundamentals, diodes, silicon controlled rectifiers, triacs, junction transistors, field effect transistors, amplifiers, power supplies, and voltage regulation. Unit 4: Digital Circuits. Logic gates, integrated circuits, combinational logic circuits, sequential logic circuits, timer circuits, flip flops, counters, adders.

Engineering Design and Development - Year Long – 1 Credit students must take both A and B sections

The knowledge and skills students acquire throughout PLTW Engineering come together in EDD as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing EDD ready to take on any post-secondary program or career. *Need to take IED & POE. Digital Electronics is recommended

House Wiring-One Semester- .5 credit

Open to Juniors, and Seniors

This course will explore the basics of house wiring. Topics will include: fundamentals of electrical circuits; AC current single and three phase theory; safety and grounding; service entrance; tools, boxes, conductors; outlets, switching circuits, and general purpose circuits; floor plan layout; appliance circuits; special purpose circuits; troubleshooting; and electric motors and controls. This course is suggested for anyone interested in pursuing a career in the Electrical field, Engineering, Maintenance, Electromechanical, or just to gain good consumer information.

Intro to Drafting - One Semester - .5 credit



Open to Sophomores, Juniors, and Seniors

***2 NTC CREDITS CAN BE EARNED UPON SUCCESSFUL COMPLETION**

All technical drawings are a language. Every language has a common set of rules to follow. This course will introduce students to the language of drafting through a variety of drafting exercises on paper and move into AutoCAD. This course will enhance a student's ability to read, interpret, and create prints that meet industrial standards and specifications.

Drafting courses are great for anyone in artistic and/or technical careers.

Introduction to Engineering and Design – Year Long – 1 Credit students must take both A and B sections

In this course students will learn basic engineering concepts. Students will study 4 units in this course all of which contain a different major concept. Some of those concepts that we will be taking a look at include: employment within the engineering career, communication, design process, sketching, and three-dimensional modeling. The students will also get a chance to design a puzzle cube, a train engine with their own designed train car and reverse engineer a selected product using AutoDesk Inventor software.

Manufacturing-One Semester- .5 credit

Manufacturing students will learn about how manufacturing is the use of machines, tools and labor to produce goods for use or sale. The class will be split up into two companies and every student will have a chance to apply for any job within the company they want. Once resumes are filled out, jobs will be filled through an interviewing process. When all of the jobs are filled within both companies, each company will work to come up with product ideas. After ideas are developed, your company will then design, manufacture and sell your products to community members. Job levels include: Management Quality Control, Sales and Production. Other Concepts Learned: People Skills, Managing People, Accounting, Inventory, Safety, LEAN Manufacturing and Production of a Quality Product.

Woods I-One Semester- .5 credit



Woods I will give students a general look at the woodworking industry, materials, and processing equipment. Students will research, plan, and create one or more beginner-level woodworking projects. Projects must gain prior approval before students can build their projects. Safe and proper use of the machines will also be taught before students begin work. Beginning level woodworking projects will be made at no cost to the students. Students will use this opportunity to learn various techniques and create a variety of simple woodworking projects to increase their skills.

***(ALL STUDENTS ARE WELCOME)**

Woods II-One Semester- .5 credit



This course will build on concepts learned in Woods I. Students will research, plan, and create one or more intermediate-level woodworking projects. Projects must gain prior approval before students can build their projects. Safe and proper use of the machines will also be taught before students begin work. The price range of the projects will vary from project to project. Students will need to pay “in-full” before they may start work on their projects.

***Woods I Required**

Woods III-One Semester- .5 credit



This course will build on concepts learned in previous woodworking courses. Students will research, plan, and create one or more advanced woodworking projects. Projects must gain prior approval before students can build their projects. Safe and proper use of the machines will also be taught before students begin work. The price range of the projects will vary from project to project. Students will need to pay “in-full” before they may start work on their projects.

*Woods I & II Required

Small Engines-One Semester- .5 credit

2 and 4 cycle gasoline engine theory of operation; fuel, ignition, cooling, and lubrication systems; tune-up and troubleshooting techniques; repair procedures; power transmission devices drivetrains clutches; hydraulic and pneumatic concepts. Students will disassemble a Kohler engine and a Briggs & Stratton engine provided by the school and will also have the opportunity to work on their own engines.

*(ALL STUDENTS ARE WELCOME)

Metals I-One Semester- .5 credit

This class is designed to give a broad overview of the Metals Industry including materials and processes used, production techniques, career possibilities and general skill development in a number of areas. These areas include SAFETY, blueprint reading, arc welding, oxyacetylene welding, MIG (wire feed) welding, TIG welding, sheet metal fabrication, metal lathe, and milling machine.

*(ALL STUDENTS ARE WELCOME)

Metals II-One Semester- .5 credit

This class is intended to build on the skills learned and developed in METALS PROCESSES 1. Areas and activities that students will cover are similar to the ones in METALS PROCESSES 1. Class will be designed around a student selected project or activity.

* METALS PROCESSES 1 REQUIRED OR INSTRUCTORS SIGNATURE

Metals III - One Semester - .5 credit

In this course, students will expand on the skills and knowledge they have gained in their previous metalworking courses. Metals III students must use class time to design, plan, and build their own project ideas throughout the semester.

Students will be responsible for covering the associated project costs.

*Metals I & II Required

Photoshop Applications in Tech ED-One Semester- .5 credit

This course will use Software such as AutoCad, Illustrator, Plasma Cam, and Photoshop to generate drawings that will be used to produce projects on the Plasma cam, and the Epilog laser. Emphasis will be on using the programs to get the best results for the project and cutter being used. Both Raster and Vector images will be produced. Emphasis will be placed on producing projects that use layers, folded, or assembled pieces. Projects will be produced using steel, wood, plastic and glass.

Principles of Engineering – Year Long – 1 Credit students must take both A and B sections

This course exposes students to some of the major concepts that they will encounter in a postsecondary engineering course of study. Students have an opportunity to investigate engineering and/or high tech career. POE gives students the opportunity to develop skills and understanding of course concepts through activity-, project-, and problem-based (APPB) learning. Used in combination with a teaming approach, APPB learning challenges students to continually hone their interpersonal skills, creative abilities, and problem-solving skills based upon engineering concepts. It also allows students to develop strategies to enable and direct their own learning, which is the ultimate goal of education.

*Need to take IED. Recommended for Juniors and Seniors. Sophomores may join with Instructor Approval.

VISUAL ARTS



DEPARTMENT INFORMATION:

It is of great value for all students to have a broad exposure to all areas of education. ART is an important subject in the education process, as it helps develop the whole person. An individual involved in creative artworks learns not only about the subject and techniques, but most important about themselves. Our modern and ever-changing world necessitates that education today provide experiences which foster original/creative thinking, self identity, problem solving skills, and aesthetic sensitivity.

Through the study of various art mediums, methods, and techniques the art department objectives are not to make artists of all students, but to provide an opportunity for any and all students to learn through and develop the following concepts: creative thinking skills, self-actualization, perceptual problem solving, communication, visual literacy, social responsibility, craftsmanship (excellence in work ethic), fine-motor skills, environmental awareness, and art appreciation.

COURSE DESCRIPTIONS:

Art 1 -One Semester –.5 Credit

This course is an introduction to art through a multiple mediums. Students will learn and apply design concepts to produce creative art projects that reflect their understanding of these concepts. Students will use the creative process, problem solving skills, art history, and quality to create work they can be proud of. Studies will include drawing, printmaking, painting, ceramics, sculpture, and street art.

Art 2 -One Semester –.5 Credit

This course will expand on prior art experience from Art 1. Students will continue to focus on advanced design concepts. Emphasis will be learning to observe, explore art history, and personal expression. Students will concentrate on different styles and methods of drawing, painting, printmaking, ceramics, photography, and sculpture. In addition, students will further learn how to focus their artistic viewpoint and create Art that better reflects their individual interests.

Prerequisite: Art 1 (formally Art & Design)

Art 3 -One Semester –.5 Credit

This course will focus on strengthening creativity, technique, composition, and craftsmanship through art. It will build upon prior knowledge gained through Art 1 & 2. Students will continue to use the creative process through further exploration in art media and techniques: drawing, printmaking, painting, sculpture, ceramics, printmaking, and digital photography. Further exploration will be done on artistic voice and perspective.

Prerequisite: Art 1 & 2

Art 4 -One Semester –.5 Credit

Art 4 is an advanced upper level course in which students will expand their art skills, undertaking greater artistic challenges. Students will work to develop quality artwork to build a portfolio. A portion of the semester will focus on developing a concentration of work which focuses on personal interest and style. The art portfolio could be submitted for Advanced Placement (AP) credit if desired by the student and approved by the Art Teacher.

Prerequisite: Art 1, 2, & 3

Ceramics-One Semester –.5 Credit

This course will enable students to develop the skills and techniques involved in the design and construction of ceramics. Studies will include hand-building techniques, such as drapes, coils, and slabs, the pottery wheel, and sculpture, along with surface decoration. Different glazes and clay bodies will also be explored. A \$10 student fee will be charged for this class.

Photoshop/Graphic Design-One Semester –.5 Credit

Throughout this course students will learn to apply the elements and principles of design to acquiring and manipulating photographic images. They will learn the fundamentals of Photoshop to manipulate images. Students will take their own digital photos or scan original images to create unique projects. This class is recommended for anyone interested in a Graphics career, or students on the yearbook, newspaper, or video yearbook staffs.

Photoshop 2 –One Semester - .5 Credit

Students will build upon their skills from Photoshop creating projects using mostly their own images. Digital photography techniques will be explored. In addition to improving technical skills, students will focus on strengthening creativity, composition, and craftsmanship.

Prerequisite: Photoshop/Graphic Design



WORLD LANGUAGES



DEPARTMENT INFORMATION:

There are FIVE, year-long Spanish courses offered in sequence. Each course is 1 credit. Students develop skills in the areas of interpersonal, interpretive and presentational communication according to the state standards. They also cultivate an awareness and sensitivity to other cultures and people as well as their own. Connections to other subject areas and comparisons between cultures and the community enrich the curriculum.

Studying a world language also reinforces English grammar and vocabulary, improves memory and study skills, and teaches self-discipline. Students will experience all this while building on 21st century skills. Extended sequential study of a world language can improve post-secondary educational opportunities*, increase employment prospects, and build a strong foundation for the language-learning journey. Learning a world language can change perspectives, open doors, and enrich lives.

*Some colleges require multiple years of a foreign language AND many offer the chance to earn retroactive credits for successful completion of the college course into which the student is placed (based on placement test). Be sure to work with your counselor, research options, and plan ahead.

COURSE DESCRIPTIONS:

Spanish I- Year Long – 1 Credit students must take both A and B sections

This is an introductory course for students with little (exploratory) or no prior experience. Upon successful completion, students will be able to communicate about themselves and others and express basic needs and wants in the present via brief conversations and reading and writing basic paragraphs in the target language.

PREREQUISITE: none

Spanish II- Year Long – 1 Credit students must take both A and B sections

This class will continue to develop skills acquired in level I and pursue more advanced expectations of grammar and vocabulary. By year end, students will be able to expand their communication skills to involve speaking, reading, writing and listening in the past and future.

PREREQUISITE: level I (C- or instructor consent)

Spanish III- Year Long – 1 Credit students must take both A and B sections

Spanish III is an intermediate level world language class. Students will be able to strengthen skills and vocabulary from levels I and II while enriching their abilities with a variety of verb tenses. Longer and more detailed communication in the target language is the goal.

PREREQUISITE: level II (C- or instructor consent)

Spanish IV- Year Long – 1 Credit students must take both A and B sections

Students enrolled in level four are seriously considering pursuing further language study. Emphasis is on day to day application of previously learned material along with using critical thinking skills in the target language.

PREREQUISITE: level III (C- or instructor consent)

Spanish V- Year Long – 1 Credit students must take both A and B sections

Students enrolled in level five are also seriously considering pursuing further language study. Emphasis is on day to day application of previously learned material along with using critical thinking skills in the target language.

PREREQUISITE: level IV (C- or instructor consent)