

USING THE COURSE CATALOG

The purpose of the course catalog is to provide students and parents with a brief description of all required and elective offerings at Great Falls High School. You will find a variety of course offerings to explore. Not all courses are offered every year, as class sections depend on student sign-up.

Please study this catalog carefully and make your choices reflecting your future goals and ambitions. You should make wise decisions and choices about your complete high school education. Freshmen through juniors are enrolled in seven periods per day while seniors are responsible for six periods per day unless the student is involved in a Work Experience program.

Your teachers and counselors are available for help with your selections for next year and for the planning of a total high school program. We urge parents to call the school counseling department at 268-6330 for answers to any questions they may have regarding their student's program.

COURSE CATALOG INFORMATION

*****This catalog is a listing of courses available to high school students at Great Falls High School. The actual courses scheduled each semester are dependent on adequate student sign-up, facilities, teacher preparation and other features associated with organizing the educational program. Therefore, not every course may be available every year or semester.**

The arrangement of the catalog is by program areas such as mathematics, science, and social studies. Required and elective courses may be selected from all program areas. The listing provides a course title, prerequisite, and an abbreviated description of content. Additional information about a specific course may be obtained by contacting the appropriate high school department chairperson or counselor.

Great Falls Public Schools

Mission statement:

All kids engaged in learning today....for life tomorrow.

Great Falls High School Graduation Requirements

Comprehensive Diploma-23 Credits

English - 4 credits; 1 credit per year
Social Studies - 3 credits Essentials of World History – 1 credit; <i>Grade 9</i> MT Gov't- ½ credit; <i>Grade 10</i> US History - 1 credit; <i>Grade 11</i> Government – ½ credit; <i>Grade 12</i>
Mathematics - 3 credits; must include Algebra or an algebra based course at any grade level
Science - 3 credits Earth and Space Science – 1 credit; <i>Grade 9</i> Biology – 1 credit; <i>Grade 10</i> Science Elective – 1 credit; <i>Grade 11 or 12</i>
Health Enhancement - 2 credits 9th Health – ½ credit 9th P.E. - ¼ credit 9th Swim – ¼ credit 10th Health – ½ credit 10th PE- 1/2 credit
Career Technical- 1/2 - 1 credit (diploma type dependent) Industrial Technology Family and Consumer Science Business Education Others: JROTC Video Production Health Sciences: Intro to Health Occ., CNA, Health Occ. Internship, EMT Basic, Anatomy/Physiology Applied Physics (either science or CTE credit)
Fine Arts- 1 credit Art, Drama, Music, and all Movies courses
Finance & Career Prep- 1/2 credit (will count toward 1 CTE if choosing a Concentration or Honors Diploma only)

GFPS Differentiated Diploma Options

	Comprehensive	Concentration	Honors
English	4 Credits	4 Credits	4 Credits
English 1-2			
English 3-4			
English 5-6			
English 7-8			
Math	3 Credits	3 Credits	4 Credits
Must include Algebra 1			
Social Studies	3 Credits	3 Credits	3 Credits
Essentials of World History (1)			
MT Government (.5)			
US History (1.0)			
Senior Government (.5)			
Science	3 Credits	3 Credits	3 Credits
Earth and Space			
Biology 1-2			
Science Elective			
Health Enhancement	2 Credits	2 Credits	2 Credits
Health 9 (.5) /PE 9 (.25) /Swim (.25)			
Health 10 (.5)			
PE 10 (.5)			
Finance & Career Prep (FCP)	.5 Credits	.5 Credits	.5 Credits
(Financial Tech Skills)			
Career Technical Ed (CTE)	1 Credit	.5 Credit	.5 Credit
Fine Arts	1 Credit	1 Credit	1 Credit
General Electives	5.5 Credits	6 Credits	8 Credits
Total Credits	23 Credits	23 Credits	26 Credits
Other Requirements			<ul style="list-style-type: none"> • Minimum 3.33 cum GPA
		<ul style="list-style-type: none"> • FCP can count toward CTE requirement 	<ul style="list-style-type: none"> • FCP can count toward CTE requirement
		<ul style="list-style-type: none"> • Electives must include 3 or more credits in a specific area of concentration: STEM, CTE, The Arts or Humanities. 	<ul style="list-style-type: none"> • Electives must include 6 or more credits of AP/Honors/Early College courses.



Advanced Placement Program

The Advanced Placement Program consists of college-level courses and exams for junior and senior high school students. Many colleges and universities give credit and/or advanced placement to students whose AP examination grades are considered acceptable.

An AP course is a special college-level learning experience that takes a full academic year. Advanced Placement courses make it possible for academically talented students to upgrade the quality and increase the challenge of their study. **Students taking AP classes are encouraged to take the AP Exams.** The following AP courses are offered at Great Falls High School:

AP US History
AP Calculus AB
AP Physics
AP Statistics

AP English 7-8
AP Art & Design
AP Biology
AP Government

Dual Credit

Students enrolled in a Dual Credit class receive both high school credit and college credit. The cost for the student is shared by the university granting the credit. The Montana University System and the University of Great Falls are the schools with current Dual Credit agreements. Refer to course catalog for current offerings.

Air Force JROTC



Air Force JROTC

Air Force JROTC

Length of Class:	Year, 1 credit (CTE credit)
Prerequisite:	None
Grade Level:	9, 10, 11, 12 (upper levels given preference, 4 th year by instructor permission)

Air Force Junior Reserve Officer Training Corps (AFJROTC) is a class and program designed to develop citizens of character dedicated to serving their nation and community. It focuses on citizenship, community service, instills personal responsibility, character, and self-discipline. The program consists of three curriculum areas that are designed to prepare students for life after high school (direct workforce, college, or military service): leadership education, aerospace science, and wellness. Leadership education equips students to be better leaders and followers within their school and community. Students are introduced to Air Force culture and foundations of good citizenship, communication and leadership theory, and career and life skills. Aerospace Science topics include the history of aviation, science of flight, and exploring space. Health and Wellness is implemented through physical training on Fridays. To get the most out of the program and be promoted in rank, students are highly encouraged to maintain at least a C- grade in all non-JROTC courses while taking AFJROTC.

JROTC is **NOT a military recruiting program** and there is no service obligation associated with the class. However, Cadets will learn and use some aspects of the military model such as uniform wear, marching and teamwork as well as followership and leadership. Additionally, Cadets must follow these standards:

- * **Maintain Air Force grooming standards (shave/haircut/hairstyles & no facial piercings)**
- * **Wear the uniform during the entire school day 1 time per week (issued by JROTC)***
- * **Follow all school guidelines and rules**
- * **Follow Air Force Core values of integrity, service before self, and excellence in all they do**

There are several voluntary community service and extracurricular activities offered. To participate in these activities, students must be active JROTC cadets in good standing. Current activities offered include:

- Drill Team (marching and performance of routines with replica rifles for competition)
- Color Guard (presenting the American flag at events such as football games/ceremonies etc.)
- Joint Leadership and Academic Bowl (JLAB)(a national academic team quiz competition)
- Flag Team (raises and lowers the flag, performs flag folding, flag retirement and other ceremonies)
- Drone Club (flies unmanned aerial vehicles)
- Marksmanship (practice and compete shooting Air rifles at an approved range)
- Archery (practice and compete shooting a compound bow)
- E-Sports (competes in team-based video game tournaments (potentially for scholarships)
- Chorus (learn and sing the National Anthem and other patriotic songs at events with the color guard)
- Awareness and Presentation Team (develop and give presentations to Middle & Elementary schools)
- Other LDRs may be added depending on interest

* Except during PE classes or other classes where the uniform would not be appropriate.

- * **Noncompliance with uniform wear/standards 3 times in a semester will result in removal from the class, a drop/failing grade, and no credit.**

NOTE: Although offered during zero period and 7th period, times for these periods are modified as follows to accommodate transportation time for CMR students in those classes:

- Zero period is 6:40 to 7:30 AM Monday-Friday
- 7th period is 2:40 - 3:30 M,T,TH,F (2:00 - 2:45 on Wednesday/PLCT days)

Visual Art



ENTRY LEVEL CLASSES

Art Workshop 1-2

Length of Class:	Year
Prerequisite:	None
Grade Level(s):	9, 10, 11, 12
Lab Fee:	\$0

This one-year course provides students with a comprehensive introduction to the visual arts and prepares them to further study in this content area. Studio experiences in the classroom will give students opportunities to experience a variety of media while developing the student's individual voice and creative problem-solving skills. Students will demonstrate their ability to respond, to analyze and to interpret their own artwork and the work of others through discussions, critiques, and writings. Students will generate a digital portfolio of artwork. Art Workshop 1-2 is a prerequisite to all other studio art classes.

Art Workshop 3-4

Length of Class:	Year
Prerequisite:	Art Workshop 1-2, or Art Teacher Recommendation
Grade Level(s):	9, 10, 11, 12
Lab Fee:	\$0

This one-year course introduces students to a comprehensive introduction to the visual arts and prepares them to further study in this content area. Content and pacing are in alignment to the advanced nature of the course. Studio experiences in the classroom will give students opportunities to experience a variety of media while developing the student's individual style and creative problem-solving skills. Students will demonstrate their ability to respond, to analyze and to interpret their own artwork and the work of others through discussions, critiques, and writings. Students will generate a digital portfolio of artwork. Art Workshop 1-2 or Art Workshop 3-4 is a prerequisite to all other studio level art classes.

STUDIO LEVEL CLASSES

Studio level courses provide a focus on student investigation and creative problem solving. Students will demonstrate their ability to respond, to analyze, and to interpret their own artwork and the work of others through discussions, critiques, and writings. As students proceed through the art program, an increased understanding of both domain vocabulary and historical and contemporary arts should be evident in their work and discourse. Students will expand on their digital portfolio started in previous course work.

Ceramics & Sculpture

Length of Class:	Year
Prerequisite:	Art Workshop 1-2 or Art Workshop 3-4
Grade Levels(s):	10, 11, 12
Lab Fee:	\$40

Sculpture students are expected to become independent thinkers and to apply their knowledge of the elements and principles of three-dimensional design and concepts to their work. Through the course of their studies, they will explore a variety of media such as metals, wood, wire, paper mâché, found object, ceramics, etc. In ceramics they will explore both functional and nonfunctional forms using a variety of traditional and innovative processes including hand-building and throwing. Students will demonstrate their ability to respond, to analyze and to interpret their own artwork and the work of others through discussions, critiques, and writings. Students will maintain a digital portfolio of their work.

Graphic Design & Photography

Length of class:	Year
Prerequisite:	Art Workshop 1-2 or Art Workshop 3-4
Grade Level(s):	10, 11, 12
Lab Fee:	\$35

This course provides a yearlong introduction to visual communication with an emphasis on the visual organization of design elements to transmit meaning and values, as well as experience in black and white film and digital photography.

Topics include shape, color, visual hierarchy, word/image relationships, typography, symbol design, and persuasion. Students will develop a verbal and visual vocabulary to discuss and critique the design world. Both analog and digital methods will be addressed with a focus on the industry standard of the Adobe Creative Cloud, including: Illustrator, InDesign, and Photoshop, to create digital drawings, logos, advertisements, magazines/catalogue layouts, brochures, and more. Visual design for communication is a focus for the course.

In addition, students will use analog cameras, operate darkroom equipment, apply toning baths and hand tinting, as well as a variety of other processes to manipulate film and black and white prints. They will also use digital cameras and a variety of programs to alter and manipulate digital images for print and display. The focus will be on photography as a fine art. Students will develop an understanding of both analog and digital processes through application, as well as further develop their ideation and approaches to composition through visual communication.

Painting & Printmaking

Length of Class:	Year
Prerequisite:	Art Workshop 1-2 or Art Workshop 3-4
Grade Level(s):	10, 11, 12
Lab Fee:	\$35

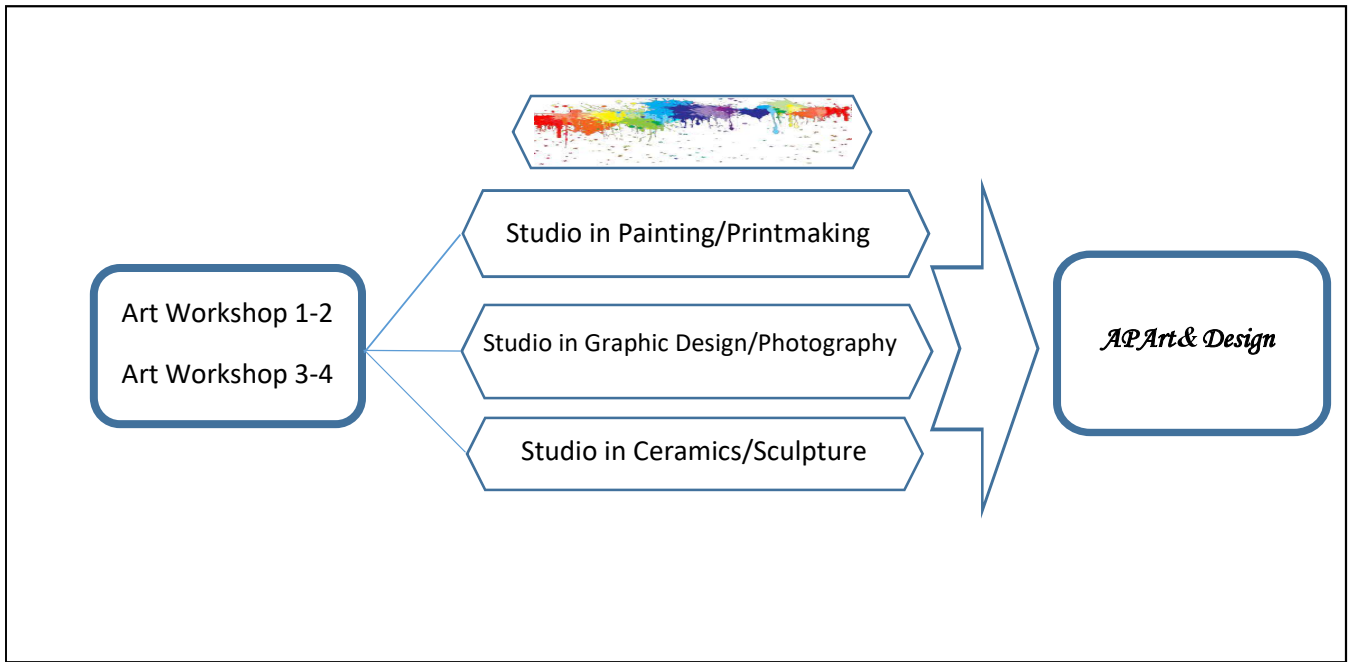
This course is designed to provide students with an in-depth experience in a variety of drawing and painting techniques such as watercolor, acrylic, oil, tempera, and encaustic. In addition, students will gain experience in a variety of drawing and printmaking techniques such as: serigraphy, intaglio, relief printing, and mono printing. Students will develop an understanding of technical processes through application, as well as further develop their ideation and approaches to composition through visual communication. Students will expand on their digital portfolio started in previous course work.

ADVANCED PLACEMENT CLASSES

AP Art & Design

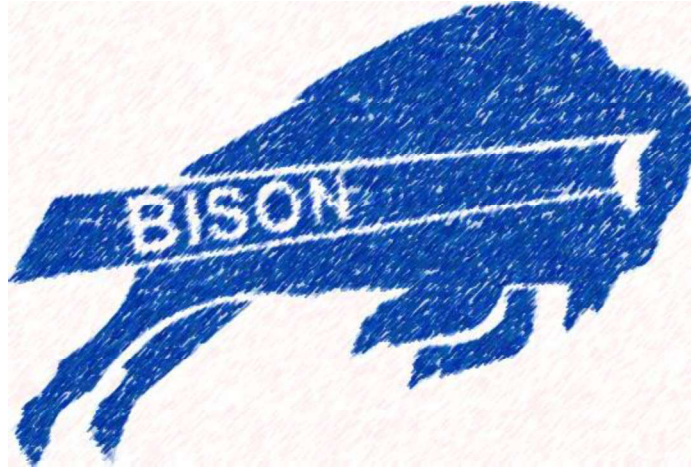
Length of Class:	Year, two class periods
Prerequisites:	At least two years of high school art as well as instructor recommendation
Grade Level(s):	11, 12
Lab Fee:	\$60

This course is a college level studio class. It is designed for the serious art student. The AP Art and Design program consists of three different courses and AP Portfolio Exams—AP 2-D Art and Design, AP 3-D Art and Design, and AP Drawing—corresponding to college and university foundations courses. Students may choose to submit any or all the AP Portfolio Exams, however it is recommended that they only attempt one per academic year. Each portfolio consists of two sections: Selected Works and Sustained Investigation. Each portfolio includes works of art and design, process documentation, and written information about the work presented. In May, students submit their portfolios for evaluation based on specific criteria, which include skillful synthesis of materials, processes, and ideas and sustained investigation through practice, experimentation, and revision, guided by questions. College Board exam fees are in addition to the course lab fee and pay for the College Board exam/portfolio submission. Students may earn three college credits per exam through the AP College Board. If all three portfolios are submitted students could earn up to nine college credits prior high school graduation in the visual arts.



Please Note: Students may earn a concentration diploma in The Arts by taking at least one fine art course per year for all four years. Upon instructor approval, studio level classes can be repeated for credit.

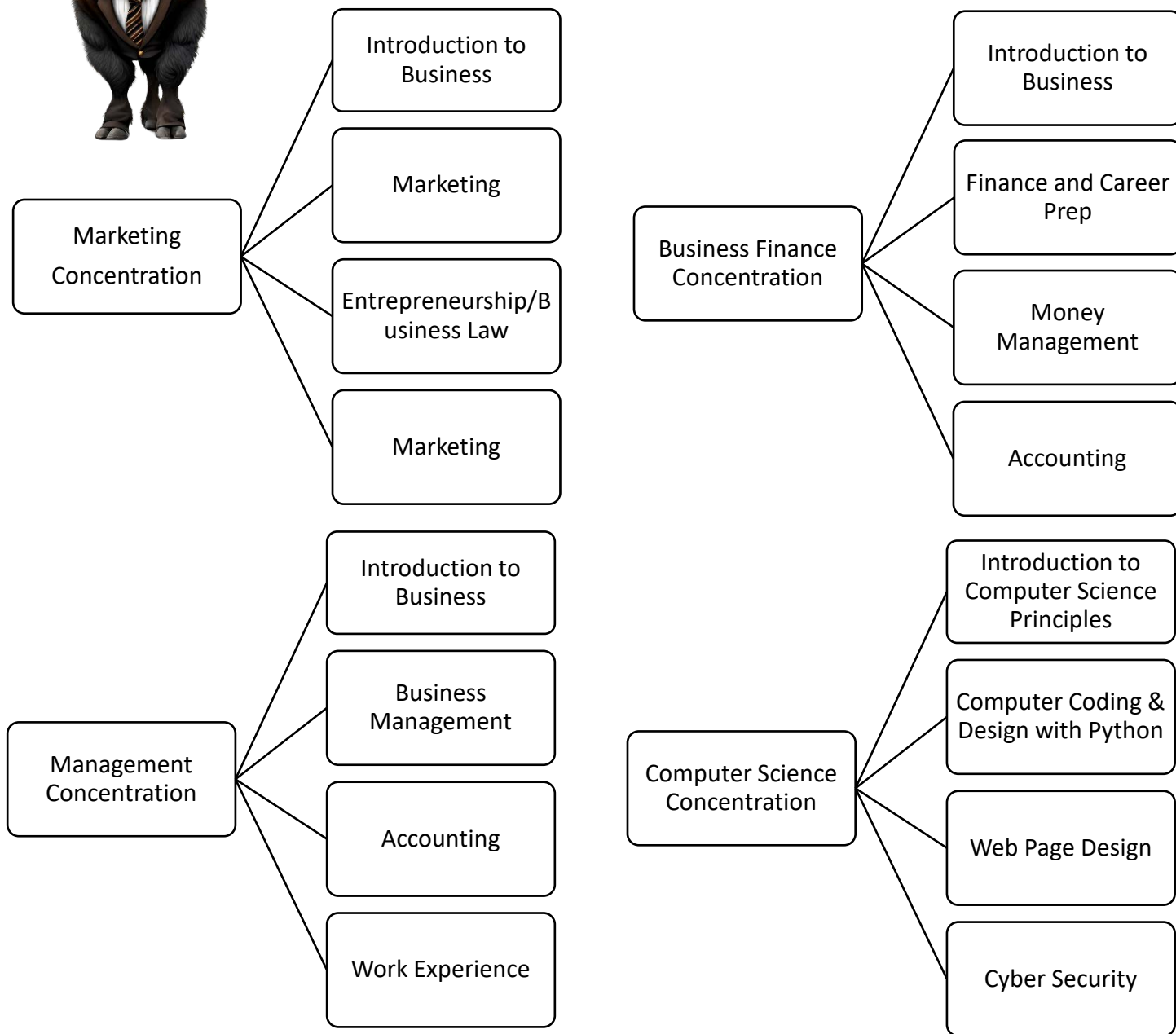
Business and Technology





Business and Computer Science

There is an introduction course for all the Business and Computer Science pathways. These courses are not required prerequisites; however they are recommended.



OPPORTUNITIES

- CTE Organizations:**
- BPA - Business Professionals of America
 - DECA - Distributive Education Clubs of America

- Independent Studies:**
- Bison Store
 - Computer Science
 - Management & Multimedia

- Off campus:**
- Work Experience
 - Cyber Security
 - Internships

Business

Accounting I

Length of Class: S, Y
Prerequisite: None
Grade Level: 10, 11, 12

Accounting is the “language of business”. This is a good introduction to any post-secondary business course. It includes the basics of bookkeeping, including journalizing, posting, preparing financial statements, adjusting and closing entries for a sole proprietorship, partnership and corporation. Students will also use an automated accounting program and/or business simulations.

Dual Credit through Great Falls College MSU is available for this course for Grades 11 and 12.

Business Management

Length of Class: Semester
Prerequisite: Any successfully completed business class
Grade level: 10, 11, 12

Students can expect to exercise their leadership skills by becoming an office manager within Bison Business. Being a Bison Business manager will instill a general competency in meeting the challenges of management and will facilitate students’ development of their own personal career aspirations. Tasks include: motivate employees, keep employees on task, monitor attendance and promptness of employees, maintain a positive climate, set up and keep the employees’ file system up to date, and write reports to document management accomplishments. Students will also study various functions of management, management theory, organized labor, human resources, business ethics, conflict resolution, personal management, and levels of management.

Entrepreneurship/Business Law

Length of Class: Semester
Prerequisite: None
Grade level: 9, 10, 11, 12

How about running your own business? Entrepreneurship/Business Law introduces students to the concept of starting or running their own business and how the law relates to business. Students will examine how to maintain integrity and make ethical decisions for their business and the community. Students will evaluate the role of the entrepreneur in the economy, and they will take risk assessments and personality profiles to determine if they have what it takes to be an entrepreneur. Students will review how business law in America works to maintain a competitive and ethical framework while conducting independent and group activities.

Finance and Career Prep (This course is required for graduation)

Length of Class: Semester
Prerequisite: 25 wpm keyboarding recommended
Grade Level: 11, 12

In this course students learn financial/life skills while learning business software. The computer applications include word processing, spreadsheets, presentation tools, email, and desktop publishing. The financial/life skills include the following: cover letters, resumes, interview skills, personal budgeting, college selection, insurance, savings and checking accounts, contracts, achieving a good credit score, credit, travel expenses, online safety, and career exploration. All of these elements will be emphasized through application exercises and projects.

Introduction to Business

Length of Class: Semester
Prerequisite: None
Grade Level: 9, 10, 11, 12

Not sure about how business works? Introduction to Business is a course that creates a foundation in business know-how for students. Topics range from surveying business careers, economic education, business management, globalization, business finance, marketing, and human resources. Various forms of technology will be highlighted to expose students to the emerging technologies impacting the business world. This course builds a foundation for further studies in business and helps students develop employability skills required in their everyday lives.

Marketing

Length of Class: Semester

Prerequisite: None

Grade Level: 9, 10, 11, 12

Creativity anyone? This course offers students opportunities to develop career-related skills, civic responsibility, and leadership competencies by participating in a variety of activities such as hands-on classroom exercises, co-curricular student organizations, school-based enterprises, and community service. This class provides students with a foundation of business knowledge in free enterprise, an understanding of general business management practices, and an awareness of core marketing functions. Subject matter includes the economic importance of marketing (getting products and services from producers to consumers), a study of consumer motivation, marketing trends, product planning and research, advertising, promotion, direct sales, and careers in marketing. Students will create a product that will be judged in our Shark Tank.

Multimedia

Length of Class: Semester

Prerequisite: None

Grade Level: 9, 10, 11, 12

Every want to try your hand at Photoshop, HTML or CorelDraw graphic design? This course includes an introduction to these programs and more. The course will provide students with hands-on knowledge of computer-aided graphics, digital photography, presentation software, web-page design, Internet usage, and desktop publishing. This course is designed for both college-prep and vocationally-oriented students.

Money Management

Length of Class: Semester

Prerequisite: None

Grade Level: 9, 10, 11, 12

Do you want to be a millionaire, or know how to overcome an economic depression? Personal Finance is a great course for students to learn how to prepare themselves financially for life. This course will introduce students to topics such as personal decision making, earning a living, managing finances, budgeting, saving and investing, purchasing as a consumer, banking, using credit, protecting against risk and learning about stocks by playing the stock market game. Not to mention, we will cover a simple plan in how to become a millionaire. Students also help run the DECA student store.

Work Experience

Length of Class: Semester/Year

Prerequisite: None

Grade Level: 10 (with instructor permission), 11, 12

Earn school credit while gaining on-the-job experience in a bona fide employment setting. This course is for those students who are presently employed and working at least 11 hours a week. It is understood that there is much to be learned from being employed, and this course reinforces what is being learned in the work setting. **Each student will meet with the instructor once a week, complete a weekly on-line assignment and bring in verification of work hours.**

Computer Sciences

Intro to Computer Science Principles

Length of Class: Semester

Prerequisite: None

Grade Level: 9, 10, 11, 12

Computer Science Principles is a one semester, introductory course that introduces students to the foundations of modern computing. The course covers a broad range of foundational topics such as programming, algorithms, the Internet, big data, digital privacy and security, societal impacts of computing, and the ways that digital information is encoded, represented, and manipulated. Through this course, students will develop a well-rounded view about data in the world around them. Global issues such as public policy, law, ethics, and societal impact of technology will also be discussed. Students will create and use visualizations to identify patterns and trends using a variety of tools and widgets. This class uses project-based programming and computer science lessons, emphasizes writing & communication skills, and fosters collaboration & creativity in the classroom.

Computer Coding and Design with Python (Introduction to Computer Programming)

Length of Class: Semester

Prerequisite: None

Grade Level: 10, 11, 12

This is a course about the practice of programming, an attempt to expose students to the development of real programs. Programming is more than just writing code. Programmers must also assess tradeoffs, choose among design alternatives, debug and test, improve performance, and maintain software written by themselves and others. Students will have the opportunity to develop these skills by working on their own code and in group projects. There will be an emphasis on the principles of software development, style, and testing. At the end of this class, expect to be proficient in using Python to build applications, understand enough about programming to be able to quickly pick up other languages, and have a good understanding of what it takes to plan, analyze, design, implement and support software applications. **Dual Credit is available for this course for Grades 11 and 12.**

Web Page Design

Length of Class: Semester

Prerequisite: None

Grade Level: 10, 11, 12

In this class, students learn how to build beautiful, interactive websites by learning the fundamentals of HTML, CSS, and JavaScript — three common coding languages on which all modern websites are built. HTML is the foundation behind all web pages. It's used to add structure and form to text, images, and more. CSS is the stylesheet language a page is styled with, to tell browsers to change the color, font, layout, and more. JavaScript is an object-oriented computer programming language used to create interactivity within web browsers. In this course, students learn the fundamentals of these three languages so that they can create visually appealing and interactive web pages. This is a useful and lucrative skill to acquire as it used by nearly every single business in the world that needs a website to communicate to its customers. By the end of this class, expect to have all the skills required to build websites or even start a career with one of the thousands of companies that have a website.

Independent Study Opportunities

Business Independent Study

Length of Class: One or two semesters

Prerequisite: Business instructor approval

Grade Level: 10, 11, 12

This course has students work on and complete real-world projects in the field of business. The projects are based on needs and requirements from the community. Students will work closely with business instructors and project leaders.

Business Department (DECA Store)

Length of Class: One or two semesters

Prerequisite: Business instructor approval

Grade Level: 10, 11, 12

This course has students working hands-on in the Business Department School Store. (DECA store) The store is managed and operated by students with the supervision of business teachers. You will decide which products are sold, market to peers, create signs and banners, and work a point of sale cash register system. Students gain work experience, management and leadership skills while earning high school CTE credit.

Computer Science Independent Study

Length of Class: One or two semesters

Prerequisite: Business instructor approval

Grade Level: 11, 12

This course has students work on and complete advanced studies in the field of Computer Science. Students design a course of study based on prior experiences and future goals. Examples include APCSA, Web Page Design, CyberSecurity, Game Design with Unity.

Cyber Security I & II (Dual Credit)

Length of Class: Year, 2 credits

Prerequisite: Completion of Computer Science courses and instructor approval

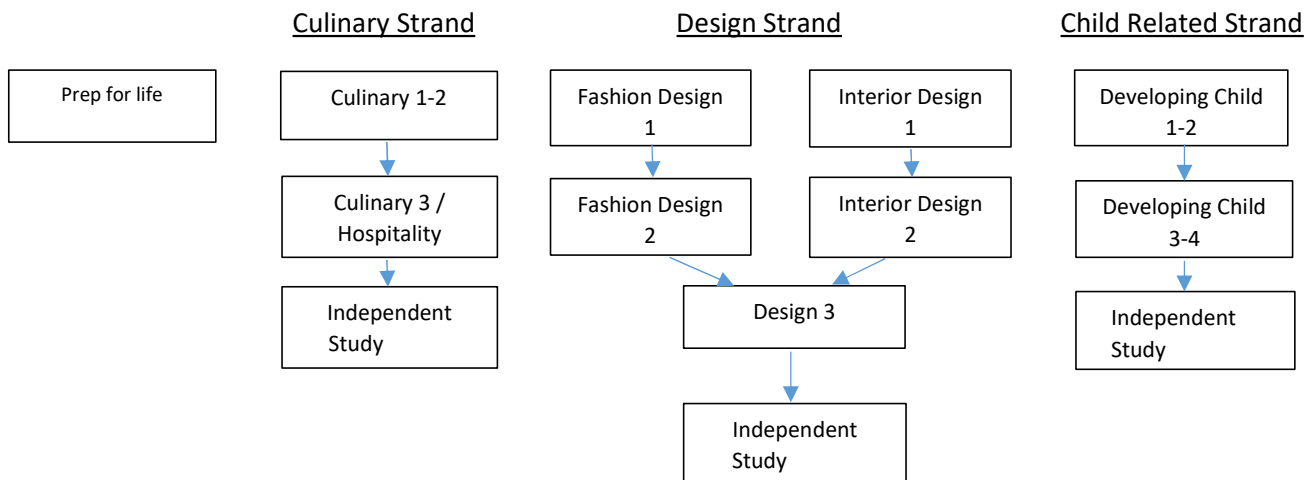
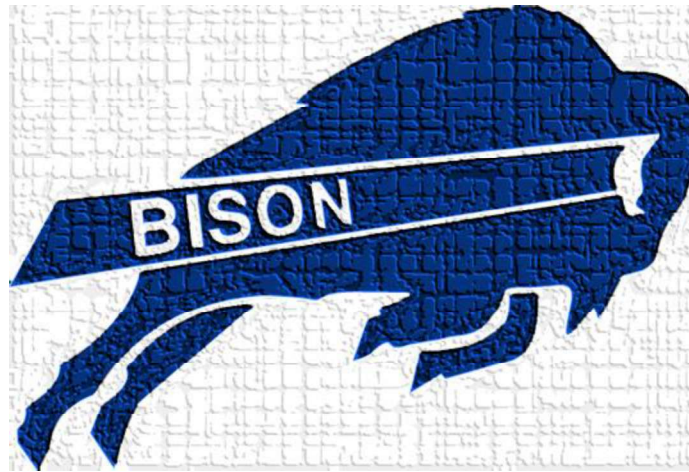
Grade Level: Recommended 11, 12

The Cybersecurity pathway prepares students for a career as a system technician/system analyst with a focus on the skills required to understand and conceptualize, design, procure, and/or build secure information technology (IT) systems.

This pathway is a dual enrollment plan with GFC-MSU and can lead to an Associate of Applied Science Degree. Upon completion of the Cybersecurity Degree, students will be able to successfully provide the support, administration, and maintenance necessary to ensure effective and efficient information technology (IT) system performance and security as an entry level or higher systems technician/system analyst.

Students registering for Cybersecurity will complete four 8 – week courses during the school year and are strongly encouraged to complete Virtual Academy in the summer of their Junior year to complete English 7-8. Other pathway courses are also offered in the summer and are strongly recommended.

Family and Consumer Science



Family and Consumer Sciences (CTE)

Culinary Arts 1-2

Length of class:	Year
Prerequisite:	None
Grade Level(s)	9, 10, 11
Class fee:	Fees Attached

Class contains basic to intermediate food preparation with an emphasis on skills, techniques, presentation and organization. Students have the opportunity to complete ServSafe Certification and training in Barista skills through work at the Bison Barista.

Culinary Arts 3/Hospitality

Length of Class:	Year
Prerequisite:	IP
Grade Levels:	11, 12
Class fee	Fees Attached

Considered an upper level course. This class is for those students with not only an interest in cooking, but also the entire hospitality industry. Course topics focus on culinary arts, travel, tourism and recreation.

Prep for Life

Length of Class:	Semester
Prerequisite:	None
Grade Levels:	10, 11, 12
Class Fee:	Fees Attached

This class will focus on and emphasize personal and social responsibility. Topics include communication skills, personal relationships, human development and responsible decision-making.

Developing Child 1-2

Length of Class:	Year
Prerequisite:	None
Grade Level(s):	9, 10, 11, 12
Class fee:	Fees Attached

This is a class for those students interested in the development of children, parenting children and working with children in a variety of venues. Students are trained in CPR in this class.

Developing Child 3-4 (Dual Credit)

Length of Class:	Year
Prerequisite:	Developing Child
Grade Level(s):	1-2 10, 11, 12
Class fee:	Fees Attached

The focus for this class will be more in-depth work with school age children in various professions. Students may complete modules to work toward a CDA. This class is designed for independent learners to work online, meet with the classroom teacher and complete internship hours. Flexibility must be a consideration. **Dual credit is an option for this class through GFC-MSU.**

Interior Design 1

Length of Class:	Semester
Prerequisite:	None
Grade Level(s):	9, 10, 11, 12
Class fee:	Fees Attached

This class enables students to explore their creativity in the field of Interior Design. Students will study the elements of design in relationship to personal space. Identification of the elements of design is emphasized. Space planning will be incorporated. Field trips will explore the world of Interior Design careers.

Interior Design 2 (Dual Credit)

Length of Class:	Semester
Prerequisite:	Interior Design 1
Grade Level(s):	9, 10, 11, 12
Class Fee:	Fees Attached

Explore in depth the principles of design and apply them in a hands-on experiential way. Students will experience design work involving the High School House. Historical periods of design along with modern applications will be emphasized. Career exploration will be examined. Internship hours may be incorporated. **Dual credit is an option for this class through Gallatin College MSU.**

Fashion Design and Construction 1

Length of Class:	Semester
Prerequisite:	None
Grade Level(s):	9, 10, 11, 12
Class fee:	Fees Attached

This is a class for those students interested in the Fashion, Design, merchandising and construction. Student will learn how to apply design principles to a variety of projects using basic sewing techniques with the conventional sewing machine, serger and embroidery machine to support design and creativity. Fabric applications may include embroidery, heat transfer, dyeing, vinyl, and laser etching.

Fashion Design and Construction 2

Length of class:	Semester
Prerequisite:	FDC 1 recommended
Grade level:	9, 10, 11, 12
Class fee:	Fees Attached

The emphasis in this class is on creativity, design and incorporating current fashion trends into class content. This course covers intermediate sewing techniques. Students will design projects on the computerized embroidery machine, quilting machine, heat transfer vinyl, dye sublimation, and the crystal press. The focus will be on production. An exploration of current trends in the fashion industry will be investigated.

Design 3

Length of Class:	Year
Prerequisite:	FDC 1 and 2 or Interior Design 1 and 2, teacher recommendation
Grade Level(s):	10, 11, 12
Class fee:	Fees Attached

An advanced level course involving independent study. This class is for students who have taken Fashion Design and Construction 1 and 2 and/or Interior Design 1 and 2. Internships in the design field will be part of this upper level course. Self-directed students will explore and determine area of study with approval of designated instructor.

Independent Study

Length of class:	Semester
Prerequisite:	Level 1 & 2 Courses recommended, teacher recommendation & approval
Grade Level:	12
Class fee:	To be determined

Individually designed to suit student needs. Specifically for students who would like to continue study in the FCS area. Possible options may include working for the Bison Baristas, Bison Wear student business, Culinary employment, Fashion Design or Interior Design. Elementary school placements or Preschool Internship may also interest students. Supervising teacher will meet with individual students to determine goals and course of study.

CTE Internship

Length of class:	Semester- ½ credit, Year-1 credit
Prerequisite:	Teacher approval
Grade Level:	11, 12
Grading:	Pass/Fail

We are pleased to share our plan for Work Based Learning through Great Falls Public Schools CTE classrooms and our Career Pathway's Program. Our goal is to provide an opportunity for our students to gain real world experience and entry-level work skills through a "pre-apprenticeship/internship" with local businesses.

Students in the program will have shown an interest and aptitude in a career pathway through their chosen CTE classes. They will be interviewed by teachers and counselors to insure their skill readiness and motivation for this type of commitment. School faculty will regularly check-in with the student and employer to make sure the arrangement is meeting the needs of both.

Foreign Language



Foreign Language

Spanish 1-2

Length of Class: Year
Prerequisite: None
Grade Level(s): 9, 10, 11, 12

Students will learn basic vocabulary and grammar, with an emphasis on speaking and listening through storytelling. Basic reading and writing will also be practiced. Students will be introduced to the cultures of Spanish-speaking countries.

Spanish 3-4

Length of Class: Year
Prerequisite: Spanish 1-2
Grade Level(s): 9, 10, 11, 12

Students will improve their listening and speaking skills while developing the ability to read and write more proficiently through storytelling. Students will expand their knowledge of Spanish-speaking cultures.

Spanish 5-6

Length of Class: Year
Prerequisite: Spanish 3-4
Grade Level(s): 9, 10, 11, 12

Students will continue to acquire more sophisticated vocabulary and grammatical structures to increase Spanish language acquisition. The class provides a more in-depth study of the cultures of Spanish-speaking countries, including a Spanish art unit.

Spanish 7-8

Length of Class: Year
Prerequisite: Spanish 5-6 & Teacher Recommendation
Grade Level(s): 9, 10, 11, 12

Students will continue to perfect their speaking, reading, and writing skills. Several advanced tenses will be introduced, and previously acquired grammatical structures will be practiced. Students will read short stories, as well as continue the study of Spanish-speaking countries.

French 1-2

Length of Class: Year
Prerequisite: None
Grade Level(s): 9, 10, 11, 12

Introduction to the French language through the four skills: listening, reading, writing and speaking. This course is taught through the TPRS method (Teaching Proficiency through Reading and Storytelling). Students will read two short novels. Culture, history and geography are important parts of this course. Students will watch two feature length French films.

French 3-4

Length of Class: Year
Prerequisite: French 1-2
Grade Level(s): 9, 10, 11, 12

Review of French 1-2 as well as continued expansion of French language, history, and culture. Students will read two short novels as well as view two feature length French films.

French 5-6

Length of Class: Year
Prerequisite: French 3-4
Grade Level(s): 9, 10, 11, 12

Students continue to improve proficiency in the four skill areas. They read two short novels, do an individual project on a French children's book, keep a journal in French, study French poetry, explore Francophone cultures, view French films for discussion in French and read *Le Petit Prince*.

French 7-8

Length of Class: Year
Prerequisite: French 5-6 & Teacher Recommendation
Grade Level(s): 9, 10, 11, 12

Students acquire a higher level of proficiency in oral and written work through grammar review, reading excerpts from various genres, novels, poetry and songs, film viewing and discussion units. Students will study French history, study Francophone cultures and read short and abridged novels. Students will keep a journal in French and create book projects based on French children's books.

German 1-2

Length of Class: Year
Prerequisite: None
Grade Level(s): 9, 10, 11, 12

Students learn the basics of the German language through listening, reading, writing, and speaking activities. History and culture are also addressed in this course.

German 3-4

Length of Class: Year
Prerequisite: German 1-2
Grade Level(s): 9, 10, 11, 12

Review of German 1-2, as well as continuation of vocabulary, grammar concepts and cultural information. Creative assignments and projects will also be introduced.

German 5-6

Length of Class: Year
Prerequisite: German 3-4
Grade Level(s): 9, 10, 11, 12

Advanced students will improve their oral and written proficiency by mastering the grammatical concepts. Class discussions and student-generated work in German are also a major part of this course. Students will be required to write weekly journals in the target language.

Health and PE



Health Enhancement & Physical Education Department

Health 9 (required for graduation)

Length of class: Semester
Prerequisite: None
Grade level: 9

Freshman Health is a required course whereas practical information for overall health and wellness will be presented. Emphasis of study and discussion will be placed on human body systems, nutrition, healthy relationships, tobacco, alcohol, drug awareness, and prescription medications.

Physical Education 9 (required for graduation)

Length of Class: Quarter
Prerequisite: None
Grade Level(s): 9

Freshmen will have three class components to satisfy their freshman HP credit. All class options are based on Great Falls Public School District's critical competencies and meet Montana and Great Falls Public School District #1's Health Enhancement Standards. The classes are co-ed and are designed to help students achieve and maintain a challenging level of health-related physical fitness. Fitness testing will be utilized in all class options. Specific activities will be incorporated in each option to allow individual student success.

SWIM 9-Swimming (required for graduation)

Length of Class: Quarter
Prerequisite: None
Grade Level(s): 9

Student will receive instruction on the six basic swim strokes and techniques; diving, snorkeling, water safety, survival skills, leisure time activities, and aquatic fitness will also be covered.

Health 10 (required for graduation)

Length of class: Semester
Prerequisite: None
Grade level: 10; open to 11 & 12 for makeup

Sophomore Health is a required course whereas practical information for overall health and wellness will be presented. Emphasis of study and discussion will be placed on: stress management, mental and emotional health including self-image, coping with loss and suicide prevention, resolving conflict and violence prevention, reproduction from conception to birth, STD's and HIV as well as body systems.

Physical Education 10- (required for graduation)

Length of class: Semester
Prerequisite: Physical Ed 9
Grade Level(s): 10; open to 11 & 12 for make-up

This course will cover a variety of sporting activities with both team concepts as well as individual skills. Activities will include a mixture of cardiovascular workouts and strength training workouts to compliment the team sports. Classes are co-ed and are designed to help students achieve and maintain a challenging level of health-related physical fitness.

Weight Training- Available only when staffing permits.

Length of Class: Semester
Prerequisite: None
Grade Level(s): 10-12

This class will utilize our SC weight room for basic to advanced skills in building and toning muscles for both strength and endurance. This class is not for those participating in extra-curricular sports.

Female Weight Training

Length of Class: Semester
Prerequisite: None
Grade Level(s): 10-12

This (*females only*) course will work with both the female athlete looking to build strength and endurance as well as the young lady that wants to learn about weight training for muscle fitness and toning.

Advanced Swimming

Length of Class: Semester
Prerequisite: PE 9, Swim 9 & Permission of Instructor
Grade Level(s): 10 (if space available and instructor allows) 11, 12

Prior approval of instructor and initial Red Cross pre-testing is required. Prospective students should have received an A or B in Swim 9. Depending on class size and make up, SCUBA diving, lifeguard training and certification may be covered. Aerobic and strength conditioning through lap swimming and drills will be stressed. The first week of class students will perform two Red Cross tests to determine eligibility for class. This class may be taken for credit more than once, but only if there is room, and with permission from the instructor.

Advanced Weight Training

Length of Class: Year
Prerequisite: Participation in a sport
Grade Level(s): 9-12

This class requires involvement in an extra-curricular sport activity at GFHS and will focus on the advanced lifts of muscle building and maintaining endurance levels for competition. This class is for males and females. Freshman will get into class if there is availability and a freshman coach provides recommendation for this.

Health Sciences



HEALTH SCIENCE

The health science classes are designed for students interested in careers in any field of health care (physician, nurse, physical therapist, athletic trainer, CNA (certified nursing assistant) veterinary medicine, dentistry, etc.). Students will receive an overview of careers in the healthcare field and prepare to enter a post-secondary healthcare program. The health science program consists of 7 courses and an internship option. Introduction to Health Occupations and Medical Terminology are prerequisites for all upper (Level III) health science classes.

Introduction to Health Occupations (CTE)

Length of Class: Year, 1 credit
Prerequisite: None
Grade Level(s) 10, 11, 12

This course serves as an introduction to healthcare. Topics include the history and trends of healthcare and health care fields, careers in health care, professionalism, legal and ethical responsibilities, cultural diversity, medical terminology and medical math. This course will provide the skills and knowledge needed to pursue careers in the medical science field and to be a knowledgeable health care consumer.

This course is highly recommended for all other health science courses. It is required for the Health Occupations Internship course.

Medical Terminology (Dual Credit) (Offered online only @ CMR)**

Length of Class: Semester, ½ credit
Prerequisites: None
Grade Level: 10, 11, 12 (Upper grade levels will be given preference)

****Dual Credit through Great Falls College MSU is available for this course and for those students who qualify. In order to receive dual credit, the student MUST be 16 years or older.**

This course will focus on the many components of a medical term by learning and recognizing word roots, prefixes, suffixes and abbreviations used in medical languages today. Learn how to combine words to create meaningful medical conditions as well as comprehend their definition and know the correct spelling and pronunciation. In this medical terminology course, we will cover medical terms related to all major body systems.

Intro to Anatomy/Physiology (CTE credit or science credit)

Length of class: Year
Prerequisite: Bio 1-2 with a 75% or higher & Intro to Health Occupations (Health Occ recommended but not required, may be taking concurrently), Medical Terminology recommended
Grade Level: 11, 12
Material fees: \$15.00

During this course, the essential principles of human anatomy and physiology are presented through lecture and lab components, including basic chemistry, cell and tissues studies, and an overview of all the body systems. This course is intended to serve the needs as an introduction anatomy course for the allied health field. There will be some dissection in this course.

Anatomy/Physiology Honors (CTE credit or science credit)

Length of class: Year
Prerequisite: Bio 1-2 with an 80% or higher
Grade Level(s): 11,12
Materials Fee: \$30.00

This lecture and laboratory based course introduces students to the structure and function of the human body. Topics such as the fundamental principles in organic and inorganic chemistry, cellular metabolism, cellular anatomy, cellular biology and histology will be covered and subsequently applied to the physiology of the body as a whole. Systems to be covered in the course include: integumentary, digestive, circulatory, lymphatic, immune, respiratory, urinary, nervous, sensory, musculoskeletal, endocrine, and reproductive. Additionally, critical thinking/medical/ case studies, global & environmental health, and disease entities will be incorporated into each system. Dissection is a component of this course. As such, those with an aversion to dissection should consider taking a different course. *Intro to Health Occ. & Medical Terminology are recommended & can be taken concurrently.*

Advanced Health Science

Length of class: Semester (1/2 credit), Year (1 credit)
Prerequisite: Intro to Health Occupations, Intro to A & P and/or A & P Honors, Medical Terminology
Grade level: 12

Students will work in a cooperative learning setting to review case studies and practical scenarios related to the function of the human body systems and current health care issues. Evaluation of these topics will allow students to apply knowledge and skills acquired to previous health science classes. Students may choose to take an additional on-line course during this course, in order to obtain certification in medical assisting.

CNA

Length of class: 1 semester or 2.5 week summer course
Prerequisites: Intro to Health Occupations, Intro to A&P and/or A&P Honors; Medical Terminology
Credit: 1/2 Credit/Pass/Fail
Grade Level: 11,12 (Preference will be given to 12th grade)

The CNA (Certified Nursing Assistant) course has different options and avenues. There is a semester course taught at GFH during the school day, or an option to take it in the summer through Benefis or GFC-MSU. All courses are taught by a highly skilled nurse with years of experience in healthcare. Students will complete BLS CPR certification during the course. After successful completion of the CNA course, students must take the certification exam. The only cost to the CNA course is for the certification exam, which varies year to year).

EMT/Basic at GFC-MSU (Dual Credit) (CTE)

Length of Class: 1st Semester (3 hours, 3 days/week)
Prerequisites: Intro to Health Occupations, Intro to Anatomy/Physiology and/or Anatomy/Physiology Honors (may be taken concurrently), Medical Terminology
Grade Level: 11,12
Credit: 1

This course will focus on skill development in the primary responsibilities of the EMT-B. Students will complete BLS CPR certification during the course. Upon successful completion of the course, graduates are eligible to sit for the Montana and National Registry certification examinations. *Students must be 18 years of age to take certification examination. If the student chooses to sit for the certification exam, there will be a cost for the travel to exam and the exam itself.*

The session at CMR is NOT a dual credit offering, but will prepare students to take the certification exam. Dual credit through Great Falls College-MSU is available for this course. Please see instructor for more information.

Health Occupations Internship

Length of class: Internship placement of 45 hours for 1 credit
Prerequisite: Intro to Health Occupations, Intro to A & P and/or A & P Honors. Medical Terminology
Grade Level: 12

Students will receive high school credit following successful completion of an extensive 45-hour job shadow in a health-related field. Hours will be determined upon internship placement. Students who decide to drop this course at semester will do so with an understanding they will receive an "F" for 1st semester.

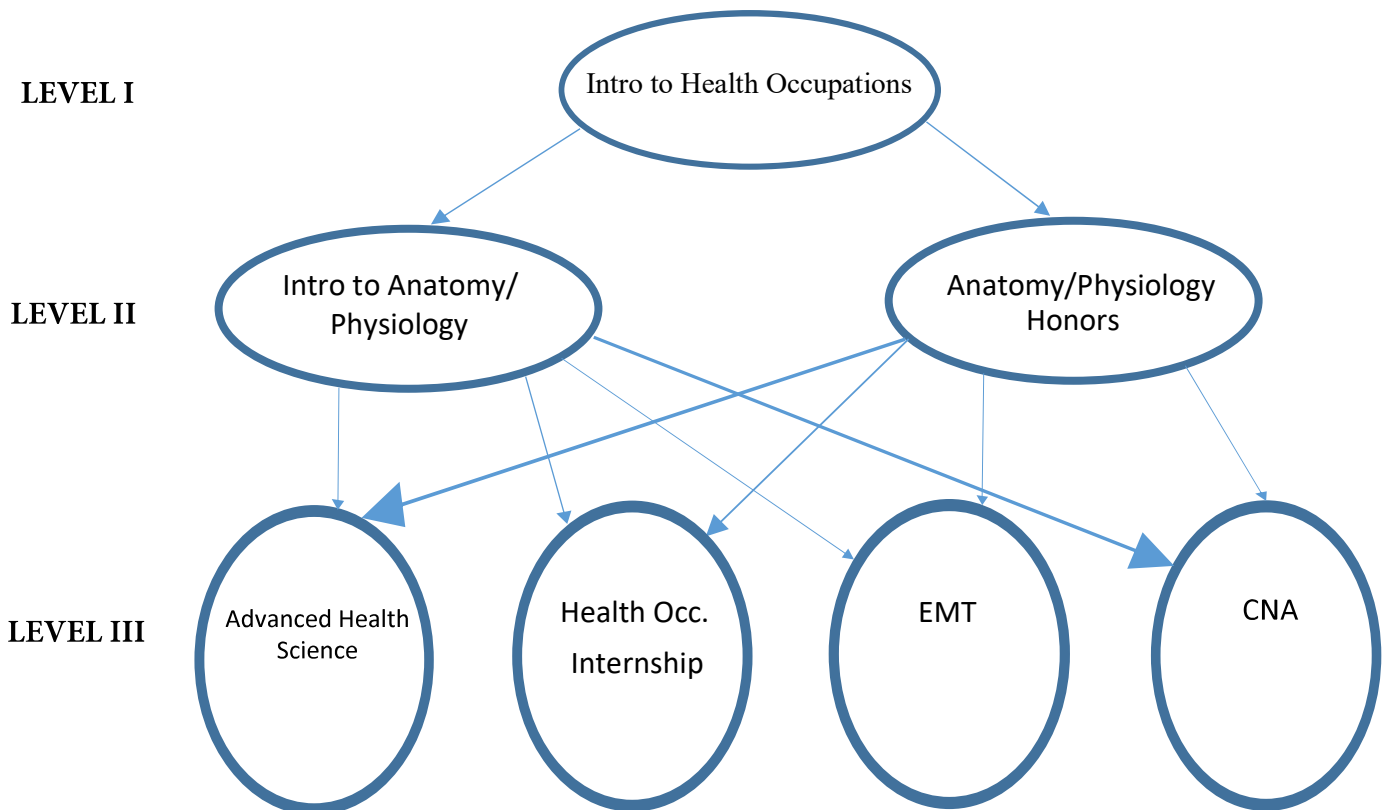
CTE Internship (Work based learning in Healthcare)

Length of class: Semester- ½ credit, Year-1 credit
Prerequisite: Teacher approval
Grade Level: 11, 12
Grading: Pass/Fail

We are pleased to share our plan for Work Based Learning through Great Falls Public Schools CTE classrooms and our Career Pathway’s Program. Our goal is to provide an opportunity for our students to gain real world experience and entry-level work skills through a “pre-apprenticeship/internship” with local businesses. Students who are working in a healthcare setting can earn credit for their time spent in the workforce.

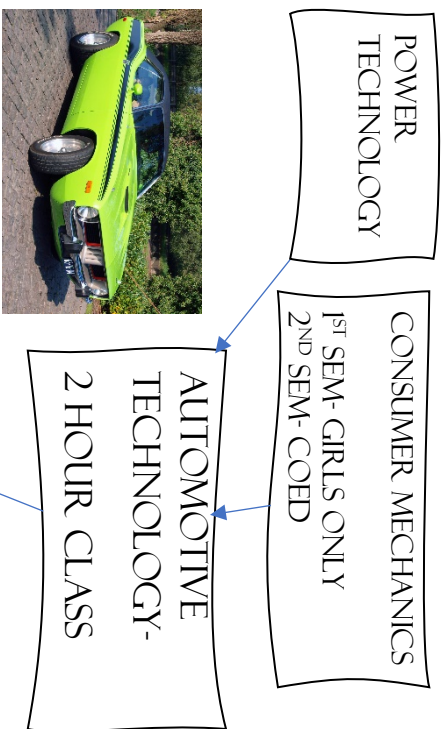
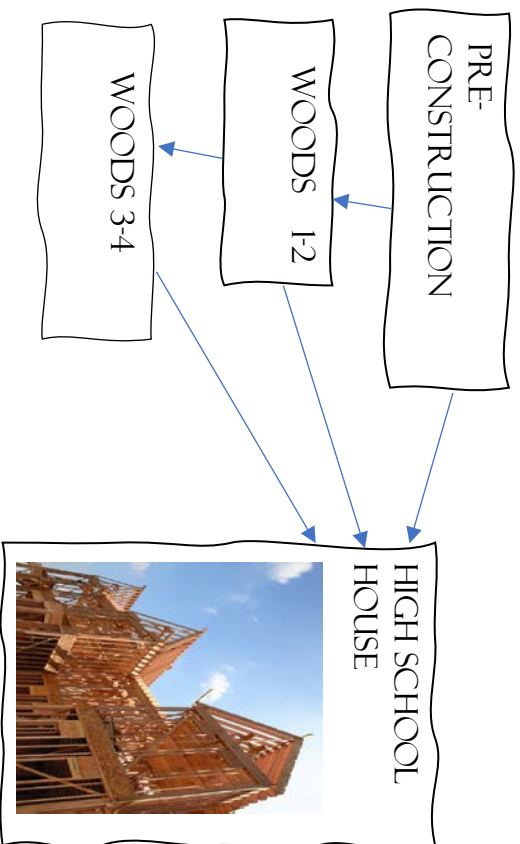
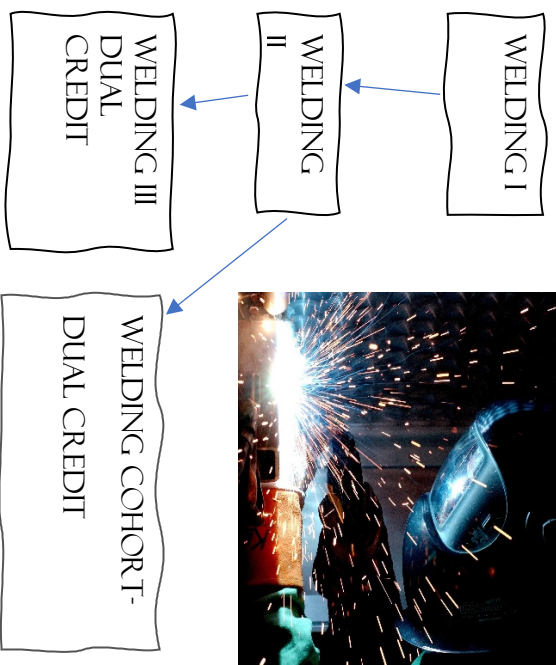
Students in the program will have shown an interest and aptitude in a career pathway through their chosen CTE classes. They will be interviewed by teachers and counselors to insure their skill readiness and motivation for this type of commitment. School faculty will regularly check-in with the student and employer to make sure the arrangement is meeting the needs of both.

**Medical Terminology required
for Level III courses.**



Industrial Technology

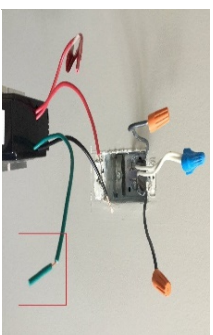




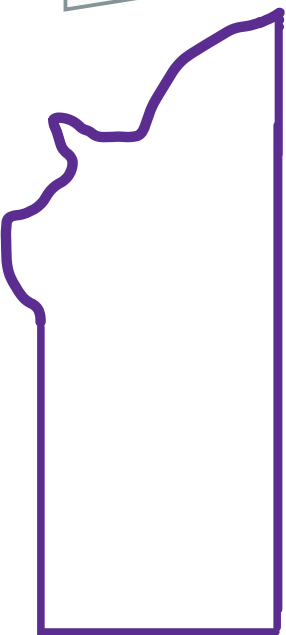
APPLIED PHYSICS

APPLIED ELECTRONICS

RESIDENTIAL ELECTRICITY



INTRO TO AUTOMOTIVE ELECTRICITY (DC ELECTRICITY)



BUILD MT

Industrial Technology Department (CTE)

Applied Electronics

Length of Class: Semester
Prerequisite: None
Grade Level(s): 9 (with instructor permission), 10, 11, 12

This course exposes students to a wide variety of electronics technologies. Examples of subject matter covered include: working safely with electricity, knowing and understanding various electronic components such as speakers, resistors, capacitors, diodes, leds, potentiometers, photocells, transistors, scrs, timer chips, and switches. Students will use the electronic components to build circuits such as burglar alarms, automatic night-lights, and sound systems. Other topics include: robotics and computer control, radio signal, infra-red signal, fiber optics, and lasers.

Introduction to Automotive Electricity(DC Electricity)

Length of Class: Semester
Prerequisite: None
Grade Level(s): 9, 10, 11, 12

Provides knowledge of DC electrical systems utilized by automobiles and machinery. It provides the foundation skills to enter any electrical or electronics field. Students will learn to work safely with electricity, read circuit diagrams, assemble, diagnose and repair circuits, measure electrical quantities, test batteries, disassemble, inspect and repair automotive charging, starting and ignition systems. The class spends 3-5 days on building simple to more complex car stereo systems.

Residential Electricity

Length of Class: Semester
Prerequisite: None
Grade Level(s): 9, 10, 11, 12

This course teaches the skills necessary to become a residential or commercial electrician, and to maintain the electrical system of a personal residence. Subjects covered are electrical safety, electrical generation and transmission, transformers, service entrances, breaker boxes, outlets, switches, wiring of components, doorbells, lighting, heating systems and A/C motors.

Applied Physics

Length of class: Year
Prerequisite(s): *Prep for Algebra, Foundations of Science and Biology or instructor permission*
Grade Level(s): 11, 12

Applied Physics is an applied physical science course that is currently one of the fastest growing curricular areas in the United States. The class is a lab-based approach to the concepts of FORCE, WORK, RATE, POWER, RESISTANCE, and ENERGY as they apply in mechanical, fluid, electrical, and thermal systems. When the principles of today's technology are explored, foundations for understanding tomorrow's technology are developed. Applied Physics is a team taught course which allows the use of both science and vocational facilities and materials. For example, one day a student might be doing a lab activity at the swimming pool and on another day be in the auto shop determining how much work the hoist does in lifting a vehicle. This class fulfills credit requirements for a lab science, career technical or elective credit.

Power Technology

Length of Class: Semester
Prerequisite: None
Grade Level(s): 10, 11, 12

The course deals with such topics as energy transfer, machines, automotive mechanics, power transmission methods, and small engine service. The lab portion of the class relates engine theory to shop practices, and actual work on small engines provides an opportunity to use what is learned. Energy efficiency as it relates to machines and engines is explored, and basic automotive maintenance procedures are discussed.

Consumer Mechanics

Length of Class: Semester
Prerequisite: None
Grade Level(s): 10, 11, 12
1st Semester Girls ONLY
2nd semester COED

Consumer mechanics is a one-half credit, one hour per day, one semester class that educates students on Engine fundamentals, purchasing, owning, and maintaining an automobile.

Automotive Technology

Length of Class: 2 hours, Year
Prerequisite: Power Tech, Consumer Mechanics or Applied Physics (may be taken concurrently)
Grade Level(s): 11, 12

Students will earn two high school credits. Auto mechanics is a two-credit, two-hour per day, year-long course designed to prepare students for technical training as well as entry level employment. The following will be covered: engines, drive trains, braking systems, electrical systems, and steering and suspension.

Automotive Technology ASE (PGEC)

Length of Class: 2 hours, Year
Prerequisite: Auto Tech with a C or better or instructor approval
Grade Level: 12

Students will earn two high school credits. Automotive Technology ASE will be a limited ASE certification course in which students will have the opportunity to train and test for two- three

Pre-Construction

Length of Class: Semester
Prerequisite: None
Grade levels: 10, 11, 12 (or with instructor approval)

This course is designed to give the students an understanding of the theory of house construction including layout and estimation. Emphasis is placed on safe use of hand power equipment. Student projects may include building sawhorses, scaffolding brackets, a doghouse, playhouse, or shed.

Woods 1-2

Length of Class: Year
Prerequisite: None
Grade Level(s): 9,10, 11, 12

This is a great class for girls and boys alike. Basic woodworking principles and machining will be emphasized. Students will develop skills necessary for most occupations, learn to build and evaluate projects together, progress to individual projects and project evaluations. Sample projects include: Cribbage boards, Chess boards, earring racks, lamps, frames, clocks, etc. Fees for the class vary depending on the material and the number of projects selected by the student. Students are required to purchase safety glasses. This class is one of two choices as a prerequisite class needed before taking Construction Technology (High School House).

Woods 3-4

Length of Class: Year, 1 credit
Prerequisite: Woods 1-2
Grade Level: 10,11,12
Fee: \$10.00

This course is designed to take the student who has completed Woods 1-2 further in their course of study in the world of woods. Instruction will be centered around practical, hands-on application with wood on both required and student-engineered projects. A real-world emphasis will be placed on the class content by not only improving upon existing wood working knowledge, but also by working cost analysis, shop time and space constraints, correct jointing procedures, and layout and proper selection of equipment and techniques best suited for the project at hand. Machine/equipment maintenance will also be covered in depth.

Construction Technology (High School House)

Length of Class: 2 hours, Year
Prerequisite: Pre-Construction or Woods
Grade Level(s): 11, 12

An advanced two-period class focusing on the Science Technology Engineering and Math involved in, residential home construction, materials testing, verification of materials, municipal utilities and infrastructure, surveying, soil mechanics, interpreting blueprints, building envelope testing, mechanical systems, water systems, cost analysis, community development, air quality testing, concrete testing, concrete placement, advanced framing, roofing, finishing and industrial safety. Students will Build Energy Star Certified House from start to finish.

Welding I

Length of Class: Semester 1
Prerequisite: None
Grade Level(s): 9, 10, 11, 12

Welding is designed for those students who seek a solid background in the basic principles and practices of welding. The course will provide instruction in welding, cutting and other joining processes that will enable students to begin with the most elementary work and progressively study and practice each process until they are skilled.

Welding II

Length of Class: Semester 2
Prerequisite: Welding I
Grade Level(s): 9,10, 11, 12

This course is designed to take students who have completed Welding I further in their course of study in the world of welding. Instruction will be centered around practical, hands-on application welding on both required and student-engineered projects. A real world emphasis will be placed on the class content by not only improving upon existing welding knowledge but also by working in the factors of cost analysis, shop time and space constraints, correct weld procedure, print reading and layout and proper selection of equipment and techniques best suited for the project at hand. GTAW and GMAW welding on both aluminum and steel will be covered in depth in addition to a closer look at welding processes covered in Welding I.

Welding 100 Dual Credit Course offered through MSU-GFC. It is a combination of Welding 1 and 2 using basic welding processes of shielded metal arch welding (SMAW), flux core arc welding (FCAW) and gas metal arc (GMAW) welding are covered in the flat, horizontal, and vertical positions in a variety of joint configurations. The instruction is focused on student's in trades' courses, agriculture and for exploration of welding in general. Instruction in the oxyfuel cutting processes and plasma cutting processes are also provided. Safe operation of equipment is covered and work is evaluated to industrial standards.

Welding III- (Dual Credit)

Length of Class: **Semester (2nd Only)**
Prerequisite: **Welding I & II and Instructor Approval**
Grade Level(s): **11 & 12**

This course is intended to introduce the student to CNC plasma cutting, Metallurgy, Non Destructive and Destructive weld testing, metal identification, 1G welder qualifications, out-of-position welding, welding fabrication and repair. Participants will learn operation and set-up procedures for CNC plasma as well as advanced welding and fabrication procedures. This class is available for CTE College Credit.

Welding Cohort (Dual Credit)

Length of Class: Year
Prerequisite: Welding II
Grade Level: 12

- * On-Track for Graduation as students attend GFH Periods 1-3 only.
- * ACCUPLACER test (\$15 fee. Available at GFH; sign-up in Counseling Office)
- *Placement score in math, ACCUPLACER test required for Math and English
- *Dual Enrollment Application, Welding Application and Personal Interview

The dual credit cohort is a competitive entry program that allows high school seniors the opportunity to complete a Certificate of Welding (total of 30 college credits and 5 high school credits) alongside their required courses during their senior year at half-price tuition. Included in the 5 high school credits, students will earn .25 credit in Writing, .25 credit in Workplace Communications and .50 credit of Technical Math. Students will be selected in February of their junior year for the following year's cohort.

WLDG 191-Special Topics Welding Skills (Dual Credit)

Length of class: Year
Prerequisite: Must be enrolled in the Welding Cohort
Grading: This class is being offered on Fridays from 1:00pm-4:00pm Pass/Fail
Grade Level: 12

This lab course is meant to give students extra time in the shop with more hands-on skill learning and practice. It is an optional course that is not required for students to take to receive their certificate.

Drafting I- Offered only when staffing permits- Not available for the 24-25 school year.

Length of Class: Semester
Prerequisite: None
Grade Level(s): 9 (with instructor permission), 10, 11, 12

Students have the option of either taking the class for Dual Credit from Montana State University Northern in Havre or High School Credit. Students will earn three college credits and one high school credit if they select the Dual Credit option. This is a basic drafting course designed to develop the students skills needed to produce drawings and understand basic drafting theory using the latest Computer Aided Drafting (CAD) equipment. Topics developed on CAD will include applied geometry, orthographic projection, dimensioning, sections, and auxiliary views. This is a 2-dimensional CAD course with a brief introduction to 3-dimensional modeling. This course prepares students for a future in fields of study such as: Drafting, Engineering, Architecture, Computer Graphics, Computer animation, Construction/Building industry.

Applied Drafting- Offered only when staffing permits- Not available for the 24-25 school year.

Length of Class: Semester
Prerequisite: Drafting I
Grade Level: 10, 11, 12

Applied Drafting is a drafting course designed to advance student skills developed in Drafting I. This class is designed to help prepare students for the Engineering and Architectural Drafting classes as well as related fields beyond high school. Topics to be addressed include: student developed basic residential plan sets using CAD software, development of working drawings, assembly drawings, and parts lists.

Architectural Drafting- Offered only when staffing permits- Not available for the 24-25 school year.

Length of Class: Year
Prerequisite: Drafting I
Grade Level(s): 11, 12

This class covers the developments of the principles in construction drawings of an average wood frame residential structure. A complete set of working drawings will be developed using AEC-CAD applications software. Students will also study the use of CAD images and animation to develop professional presentations.

Engineering Drafting- Offered only when staffing permits- Not available for the 24-25 school year.

Length of Class: Year
Prerequisite: Drafting I
Grade Level(s): 11, 12

A complete technical drafting course aimed at meeting the needs of students interested in drafting, engineering, computer graphics, computer animation, construction/building industry. It is the study and application of standards used for producing working drawings, including the fundamentals of geometric dimensioning and tolerances. Both detailed and assembly drawings will be produced from 3-dimensional computer models. Students will also produce presentation renderings and animations of mechanical parts.

Independent Study

Length of Class: One or two semesters
Prerequisite: Industrial. Tech. instructor approval
Grade Level: 11, 12

This course has students work on and complete real world projects in the industrial trades areas. The projects are based on needs and requirements from the community. Students will work closely with IT instructors and project leaders.

CTE Internship

Length of class: Semester- ½ credit, Year-1 credit
Prerequisite: Teacher approval
Grade Level: 11, 12
Grading: Pass/Fail

We are pleased to share our plan for Work Based Learning through Great Falls Public Schools CTE classrooms and our Career Pathway's Program. Our goal is to provide an opportunity for our students to gain real world experience and entry-level work skills through a "pre-apprenticeship/internship" with local businesses.

Students in the program will have shown an interest and aptitude in a career pathway through their chosen CTE classes. They will be interviewed by teachers and counselors to insure their skill readiness and motivation for this type of commitment. School faculty will regularly check-in with the student and employer to make sure the arrangement is meeting the needs of both.

Build Montana

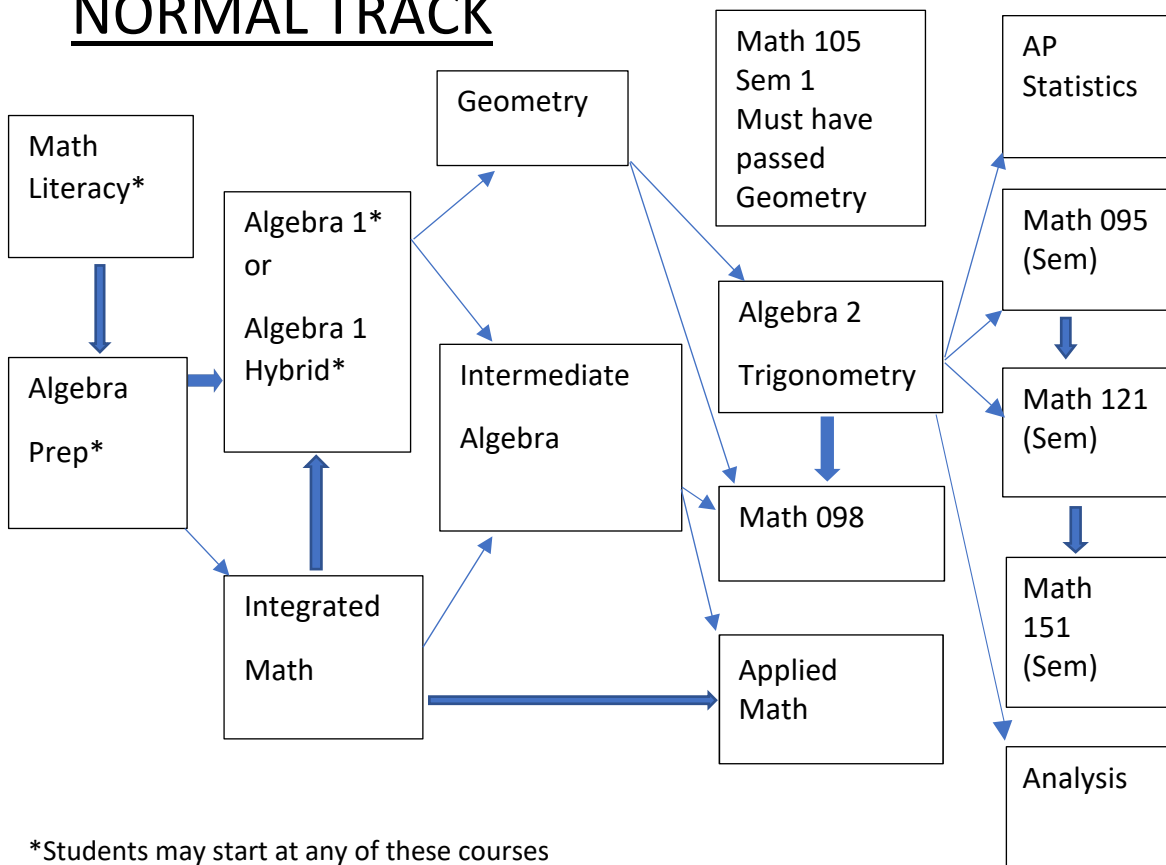
Length of Class: Spring Semester, afternoons (5th period travel time, 6th & 7th periods)- 1 credit
Prerequisite: Any CTE course above/beyond Intro. to Industrial Tech
Grade Level: 12; Theory hours location= PGEC , Lab hours location= Various job sites

The Build Montana course is designed to introduce you to the world of commercial construction. This course will offer experiences using heavy equipment, highway building, vertical construction, basic concrete knowledge, and more. GFPS instructors will provide theory work through John Deere University, as you learn basic mechanic skills, safety, and workplace readiness. You will work with equipment dealers and community commercial construction partners and mentors, as you are introduced to the skills necessary to complete horizontal and vertical building projects such as: hospitals, hotels, gas stations, museums, etc; up to, and including, running heavy equipment. In addition, instructors and industry partners will expose you to the opportunities available in the construction trades in our state through additional tours and field trips. Opportunities to obtain your CDL (Commercial Driver's License) may be provided.

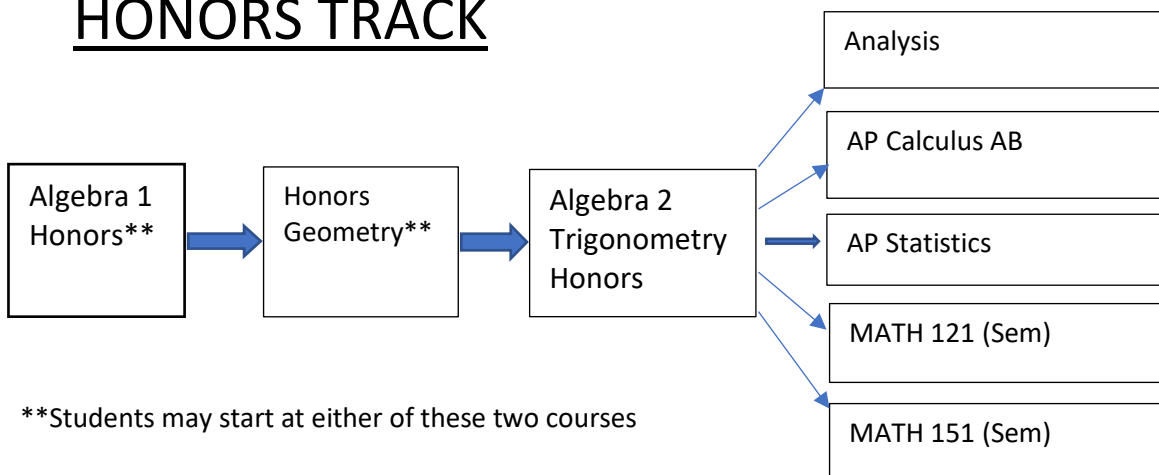
Math



NORMAL TRACK



HONORS TRACK



Math Literacy

Length of Class: Year
Prerequisite: MAP scores and/or teacher recommendation
Grade Level(s): 9-12

Class is designed to improve math skills in the areas of fractions, decimals, percentages, integers, basic geometry and solving algebraic equations. The purpose of this class is to continue to develop these same skills on a more advanced level in order to prepare students for algebra topics.

Algebra-Prep

Length of Class: Year
Prerequisite: Teacher recommendation and/or MAP score
Grade Level(s): 9-12

Provides a foundation for Algebra 1. Topics include a review of fractions, percentages, and decimals. Additional topics include solving equations, graphing linear functions, solving systems of equations, polynomial simplification, area, perimeter, introductory statistics, factoring and solving basic quadratic equations.

Integrated Math

Length of Class: Year
Prerequisite: Algebra Prep or Algebra I with Teacher recommendation
Grade Level(s): 10-11

This course offers basic topics from algebra, geometry, and statistics. An emphasis will be placed on real world connections to help students be on track for graduation.

Algebra 1

Length of Class: Year
Prerequisite: Alg. Prep. or Teacher Recommendation
Grade Level(s): 9, 10, 11, 12

The course covers solving linear and quadratic equations and linear inequalities, graphing linear functions and linear inequalities, factoring, solving systems of equations, polynomial operations, problem solving, simplifying radicals and solving radical equations. An emphasis will be placed on real world connections. This course is required for graduation.

Algebra 1 Hybrid

Length of Class: Year
Prerequisite: Alg. Prep. or Teacher Recommendation
Grade Level(s): 9, 10, 11, 12

The course covers solving linear and quadratic equations and linear inequalities, graphing linear functions and linear inequalities, factoring, solving systems of equations, polynomial operations, problem solving, simplifying radicals and solving radical equations. An emphasis will be placed on real world connections. This course is required for graduation. An on-line MathXL program is used for all homework and testing. Students should have both computer and internet access at home.

Algebra 1 Honors

Length of Class: Year
Prerequisite: Teacher Recommendation and/or MAP score
Grade Level(s): 9

Must also have strong eighth grade teacher recommendation. (Honors preferred) Course covers all topics from Algebra 1 covered at a faster pace and problems are at a higher difficulty level. Additional topics include rational expressions and equations, algebraic proof, introductory trigonometry and exponential functions.

Geometry

Length of Class: Year
Prerequisite: Successful Completion of Algebra 1
Grade Level(s): 10, 11, 12

This course is designed to build on the basic geometric ideas learned in middle school math. Students review algebraic skills as they apply to geometric concepts including triangle congruence and similarity, the study of polygons, transformations and constructions, and basic trigonometry.

Honors Geometry

Length of Class: Year
Prerequisite: Algebra I Honors (Teacher Recommendation)
Grade Level(s): 9, 10

This course covers all topics from Geometry including a study of proofs. Topics are covered at a faster pace and problems studied are more difficult than in Geometry. An extensive review of honors algebra topics will occur throughout the year to enhance preparation for Algebra II/ Trigonometry Honors.

Intermediate Algebra

Length of Class: Year
Prerequisite: Algebra 1 (Teacher Recommendation Preferred)
Grade Level(s): 10, 11, 12

This course allows students to gain a better understanding of algebra (covers topics from Algebra 1) while introducing students to basic geometry. Two quarters each of algebra and geometry are included.

Applied Math

Length of Class: Year
Prerequisite: Algebra 1 Teacher Recommendation
Grade Level(s): 12

Course is designated with an emphasis on business math and is to provide students with skills needed for everyday living including personal finances, budgeting, taxes, banking, etc.

Algebra II/Trig

Length of Class: Year
Prerequisite: Algebra I, Geometry
Grade Level(s): 10, 11, 12

Course provides the background needed for the study of pre-calculus, physics and engineering. Topics include analyzing linear and quadratic equations, systems of linear equations and inequalities and their graphs, polynomial, exponential and logarithmic functions, trigonometry and its applications.

Algebra II/Trig. Honors

Length of Class: Year
Prerequisite: Algebra IH, Honors Geometry (Teacher Recommendation)
Grade Level(s): 10, 11

Course provides the background needed for the study of calculus, physics and engineering. Topics include an in-depth study of the algebra of relations, functions (polynomials, rational, exponential and logarithmic) and their inverses plus a comprehensive study of analytical trigonometry, trigonometry, applications, systems of equations, inequalities, and conic sections.

Introductory Algebra 098

Length of Class: Year
Prerequisite: Placement based on ACT or ACCUPLACER score or Teacher Recommendation
Grade Level(s): 12

Introductory Algebra initiates the development in students' ability to organize thought processes and systematically solve problems while preparing students for studies in other courses. Course emphasis includes manipulation of variables, exponential applications, introduction to and factoring of polynomials, solving equations, and radicals. Introductory Algebra emphasizes systems of equations, determinants, systems of inequalities, rational expressions, radical expressions, complex numbers, quadratic equations, and exponential and logarithmic functions.

Intermediate College Algebra 095

Length of Class: Semester
Prerequisite: Placement based on ACT or ACCUPLACER score Teacher Recommendation
Grade Level(s): 12
\$20 Math XL Fee

This course offers a review of algebra with a deeper emphasis on factoring, systems of equations, determinants, systems of inequalities, rational expressions, radical expressions, complex numbers, quadratic equations, polynomial functions, conic sections, as well as exponential and logarithmic functions. Technology enhanced, the overall goal of the course is to prepare students for a smooth transition to college algebra.

College Algebra 121 (Dual Credit)

Length of Class: Semester
Prerequisite: Qualifying ACT or ACCUPLACER Score or Teacher Recommendation
Grade Level(s): 12
\$20 Math XL Fee

This course presents concepts, principles and methods of college-level algebra. Topics to be covered include polynomial, rational, radical, exponential, and logarithmic functions and their graphs, and real and complex numbers. This course is transferable and is designed to satisfy the general education requirements for graduation from colleges and universities within the Montana University System.

Pre-calculus 151 (Dual Credit)- SEM 2

Length of Class: Semester
Prerequisite: College Algebra 121 grade of C or higher and/or qualifying ACCUPLACER/ACT score
Grade Level(s): 12
\$20 Math XL Fee

This course prepares students for calculus. It covers polynomial, rational, exponential, logarithmic and trigonometric functions from an algebraic and a graphical perspective including solving related equations, inequalities and applications. Inverse functions, conics, polar coordinates and equations, parametric equations, and trigonometric laws and identities will also be covered.

Analysis

Length of Class: Year
Prerequisite: Algebra II/Trig (Teacher Recommendation)
Grade Level(s): 11, 12

This course consists of the study of a variety of advanced mathematical concepts including vectors, parametric equations, matrices, logarithms, and limits. Includes working with trigonometry and an introduction to differential calculus.

AP Calculus AB

Length of Class: Year
Prerequisite: Algebra II/Trig Honors
Grade Level(s): 11, 12

This course is a study of a variety of topics from differential and integral calculus, including work with trig and analytic geometry. College credit is available for those who successfully complete the AP Calculus exam (student expense).

Contemporary Math 105 (Dual Credit) (on-line)

Length of class: Semester
Prerequisite: Geometry, Students must meet GFCMSU Math Placement scores via ACT or Accuplacer
Grade Levels(s) 11, 12
\$20 Math XL Fee

An introduction to mathematical ideas and their impact on society. Math 105 provides an introduction to statistics among other topics. Course topics include interpreting data, normal distributions, correlation, least squares regression, sampling designs, experimental designs, probability, financial math, linear and exponential growth, functions and basic geometry. As dual enrollment, this course satisfies the general education mathematics requirement. The course is offered on-line, however please realize that all exams are proctored and all proctors must be approved by GFCMSU.

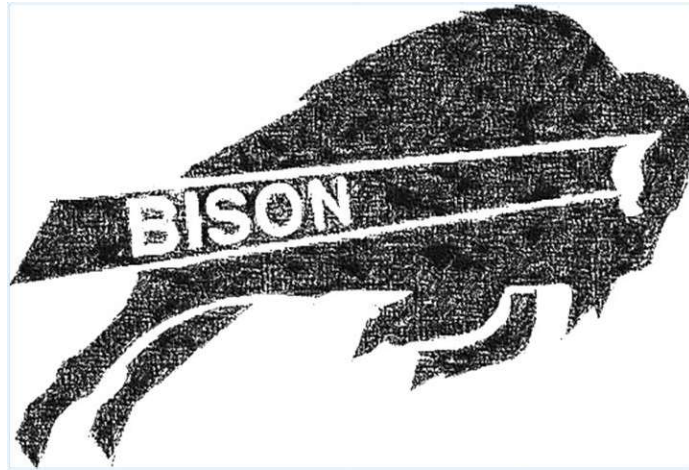
AP Statistics (Dual Credit)

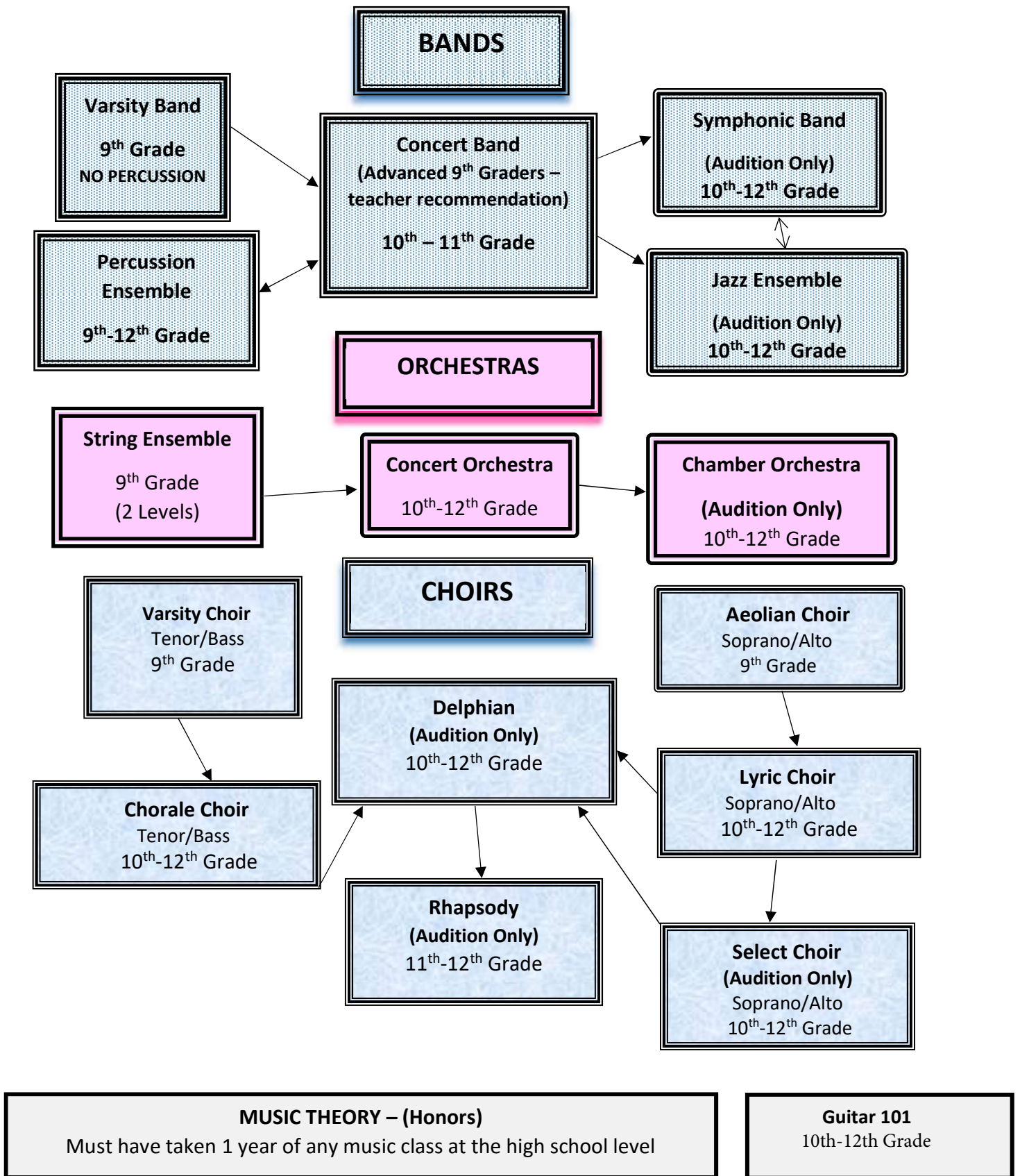
Length of Class: Year
Prerequisite: Algebra II/Trig or Alg. I Honors and Instructor Permission
Grade Level(s): 11, 12

All topics covered in the Math 105 class are covered, as well as exponential and power regression, binomial and geometric distributions, Type I and Type II errors, Chi-Square Testing, Z-tests and T-tests for means and proportions. This course is faster paced than the Math 105 class and will prepare students for the AP exam.

This is a Dual Credit class. To qualify for this option, students must meet math placement scores. Students will receive four semester credits from Great Falls College-MSU and one high school credit.

Music





Music (Fine Arts)

Aeolian Choir

Length of Class:	Year
Prerequisite:	Placement Test
Grade Level(s):	9
Voicing:	Soprano/Alto
Class Fee:	\$10.00

A choral group for higher voices. Students will develop music theory, sight reading and musicianship skill. Vocal skills and performance will be emphasized. A wide variety of choral literature will be studied and performed.

Varsity Choir

Length of Class:	Year
Prerequisite:	None
Grade Level(s):	9
Voicing:	Tenor/Bass
Class Fee:	\$10.00

This is an entry level choir designed for lower voices, which develops music theory, sight-reading and musicianship skills as well as vocal and performance abilities. This class will explore a variety of musical styles and time periods.

Chorale Choir

Length of Class:	Year
Prerequisite:	Placement Test
Grade Level(s):	10, 11, 12
Voicing:	Tenor/Bass
Class Fee:	\$10.00

An intermediate choral group for lower voices, which continues to build vocal and musicianship skills. A wide variety of literature styles is performed.

Lyric Choir

Length of Class:	Year
Prerequisite:	Placement Test
Grade Level(s):	10, 11, 12
Voicing:	Soprano/Alto
Class Fee:	\$10.00

Lyric is an intermediate choir for higher voices focused on developing individual voices and musicianship. Emphasis is placed on building confidence, teamwork, and increasing each member's potential. Lyric performs a wide variety of music throughout the year, with limited travel or outside commitments.

Select Choir

Length of Class:	Year
Prerequisite:	Audition
Grade Level(s):	10, 11, 12
Voicing:	Soprano/Alto
Class Fee:	\$10.00

An advanced choir for higher voices with good vocal ability and musicianship skills. Emphasis is on building good tone quality, sight-reading, and the performance of a wide variety of choral music. There is limited travel.

Delphian Choir

Length of Class:	Year
Prerequisite:	Audition
Grade Level(s):	10, 11, 12
Voicing:	Soprano/Alto/Tenor/Bass
Class Fee:	\$10.00

This is a highly select ensemble. It is a versatile group, performing music from a variety of musical periods and genres. This ensemble travels and performs often representing Great Falls High School. Entrance into this choir requires a mastery of music theory, sight-singing and musicianship skills as well as excellent vocal and performance abilities.

Rhapsody

Length of Class:	Year
Prerequisite:	Audition & Delphian Membership
Grade Level(s):	11, 12
Voicing:	Soprano/Alto/tenor/Bass
Class Fee:	\$10.00

This ensemble is derived from the Delphian Choir. Entrance into this choir requires a mastery of music theory, sight-singing and musicianship skills as well as excellent vocal and performance abilities. This ensemble is considerably smaller, making it ideal for chamber music and repertoire suited for ensembles of its kind such as jazz and quality popular music. There are additional time requirements and events for students in Rhapsody.

String Ensemble

Length of Class:	Year
Prerequisite:	Prior Orchestra Experience
Grade Level (s):	9
Class Fee:	\$10.00

An entry-level orchestra that develops musicianship and rehearsal techniques. A variety of literature is presented with emphasis on developing technical skills.

Concert Orchestra

Length of Class:	Year
Prerequisite:	String Ensemble
Grade Level (s):	10, 11, 12
Class Fee:	\$10.00

An intermediate to advanced ensemble that continues to build technique and musicianship. Freshmen with advanced skills may request an audition. A variety of literature is presented.

Chamber Orchestra

Length of Class:	Year
Prerequisite:	Audition
Grade Level (s):	10, 11, 12
Class Fee:	\$10.00

This is a select orchestra for students with advanced string skills. A wide variety of literature is presented with emphasis on excellence in performance. This group represents Great Falls High School at various festivals and events throughout the year. Students must be highly committed and are encouraged to take private lessons. Sophomores with advanced skills may request an audition.

Percussion Ensemble

Length of Class:	Year
Prerequisite:	Required of all 9th grade percussion students, and an elective for grades 10-12, if they are also enrolled in Concert or Symphonic Band.
Grade Level (s):	9-12
Class Fee:	\$10.00

This class will explore basic percussion skills, including rudiments and accessory percussion skills, as well as working and playing through percussion ensemble literature. This class will also focus on marching band drum line techniques in the fall during football season. All 9th grade percussion students should enroll in this class and then will be assigned parts to play with the Varsity Band in concerts. Upperclassmen will perform in various ensembles throughout the year as part of the class.

Varsity Band

Length of Class:	Year
Prerequisite:	Prior Band Experience
Grade Level (s):	9
Class Fee:	\$10.00

Continues to build basic band skills learned in middle school. Will study a wide range of music along with emphasis on technical skills. A variety of band literature will be studied along with an emphasis on individual technical skills. Band students will also be members of the Thundering Herd Marching Band.

Concert Band

Length of Class:	Year
Prerequisite:	Varsity Band
Grade Level (s):	10, 11, 12
Class Fee:	\$10.00

Some freshmen with director permission may be allowed to take this class. Continues building music ensemble skills with an emphasis on technical skills as well as expanding into more advanced band literature. Students are also members of the Thundering Herd Marching Band in the fall.

Symphonic Band

Length of Class:	Year
Prerequisite:	Percussion Ensemble or Concert Band/Audition
Grade Level (s):	10, 11, 12
Class Fee:	\$10.00

Trains members to attain the highest standards in performance and artistic expression. The class contains numerous performances, festivals and tours so students must be highly committed. Students are also members of the Thundering Herd Marching Band in the fall and are encouraged to partake in small ensembles and to take private lessons.

Jazz Ensemble

Length of Class: Year
Prerequisite: Concert or Symphonic Band, and audition
Grade Level(s): 10, 11, 12
Class Fee: \$10.00

Must audition. This is a highly selective big band jazz ensemble dedicated to the highest standards in jazz performance. There will be numerous concerts, festivals and tours so students must be highly committed. Membership is dependent upon a balanced instrumentation in all sections. Individual improvisation is stressed in class as well as performance techniques. Students must be a member of a regular concert band as well, except for piano, bass and guitar vacancies.

Guitar 101

Length of Class: Year
Prerequisite: None
Grade Level (s): 10,11,12
Class Fee: \$15.00 Guitar rental

This is a beginner level course for acoustic guitar. Topics will include note reading, composition, playing chords and tablature. Students will play as a soloist and as a member of an ensemble. Many different playing techniques will be studied that encompass those used in classical to rock and roll guitar. Guitars are available to check out; however, students may use their own if they wish. A rental fee is assessed for school instruments.

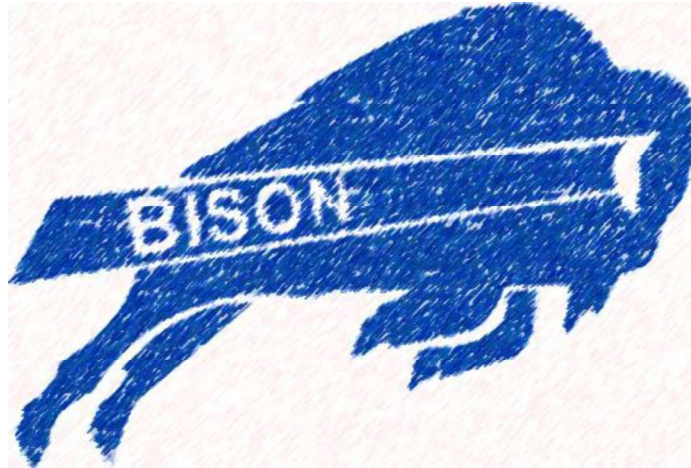
Music Theory (Honors) Dual Credit

Length of Class: Year
Prerequisite: 1 year of music study in performing ensemble or instructor permission
Grade Level (s): 11, 12 (10 with instructor approval.)
Class Fee: \$10.00

Music theory studies the elements of music: sound, pitch, rhythm, melody, harmony, and notation. Students will learn to speak the language of music, as well as learn how to analyze and dictate music. This class explores the practices and possibilities of music notation.

This course may be taken for dual credit through GFC-MSU.

Science



Science Department

Earth and Space Science

Length of Class: Year
Prerequisite: None
Grade Level (s): 9

The Earth and Space Science course introduces students to the study of the Earth from a local and global perspective. While presenting the concepts and principles essential to students' understanding of the dynamics and history of the Earth, students will explore the Earth cycles, nature of science, and Earth systems. Units will include: plate tectonics, earthquakes and volcanoes, rock cycle, weather and erosion, water cycle, atmosphere and climate, our solar system, and the universe. Upon completion of the course, students will have a clear understanding of the dynamic forces at work in the world around them, becoming better stewards of our planet Earth.

Honors Earth and Space Science

Length of Class: Year
Prerequisite: Teacher recommendation, proficient MAP reading score, B or better grade in 8th grade science
Grade Level (s): 9

Students in the Honors Earth and Space Science classes will follow the same Earth and Space Science curriculum and topics in the same sequence. However, honors students are expected to do more reading and writing, think deeper, and apply a higher level of mathematics to science. Honors students will do many of the same learning activities and assignments as other students. However, a deeper understanding of the topics will be gained and applied to everyday life. Students will be assessed through projects, homework and activities that occur both in and out of the classroom. Students in the honors classes typically have better reading comprehension, more interest in science, and have a better aptitude for understanding difficult science concept. They are more organized, more disciplined in their approach to homework, and more motivated to excel in science. Additionally, these students demonstrate the classroom behavior that promotes learning of everyone in the class. Students in these classes will be exposed to more in-depth study to further motivate interest in taking additional upper level science courses. Students taking an honor level Earth and Space Science class will also be better prepared for our upper level science courses because they will have worked at a rigorous level. This preparation will allow the upper level science course instructors to focus on more curriculum. Students will also be exposed to a wide range of materials that will connect and affect their adult life and possible STEM career choices.

Biology 1-2

Length of Class: Year
Prerequisite: None (Freshman Science preferred)
Grade Level(s): 10 or *IP*

This is a laboratory science covering the major areas of the living world with special emphasis on studies of the structure & processes in organisms, ecosystems, heredity, and biological evolution.

Honors Biology 1-2

Length of Class: Year
Prerequisite: B average in Earth and Space Science
Grade Level(s): 10 *or IP*

This laboratory science covers the major areas of the living world. Through class discussions, laboratory activities, data analysis, and reading assignments, students will gain the organizational skills, study skills, critical thinking skills, and analytical writing skills that are essential for success in all academic endeavors. Topics covered include: chemistry, cell biology, molecular biology, genetics, evolution, and ecology. The basic concepts covered are the same as BIO 1-2; however, those concepts will be covered in greater depth. Additional concepts will be studied with an emphasis on higher-level critical thinking, study skills, and increased content knowledge. This challenge prepares a student for further advanced classes in all areas of science.

Biology 3-4

Length of Class: Year
Prerequisite: Biology 1-2
Grade Level(s): 11, 12 *or IP*
Lab Fee: \$20.00

Biology 3-4 is organism-based biology. This course is designed to complement the cell-based sophomore Biology 1-2. Students will investigate topics in zoology, microbiology and botany. Emphasis will be placed on comparative anatomy and physiology, animal behavior, ecology, evolution and the impacts to human health. Students will participate in labs with live organisms as well as several dissections. Individuals with an aversion to dissection should not consider this course. Those students signing up for Biology 3-4 will be required to build an insect collection. Prerequisites for this course include having passed Biology 1-2. Lab fees must be paid no later than September 30.

AP Biology

Length of Class: Year
Prerequisite: Biology 1-2 (80% min)
Grade Level(s): 11, 12 *or IP*

Advanced Placement (AP) Biology is designed to be the equivalent of a college introductory biology course. AP Biology aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. Through class discussions, laboratory activities, data analysis, and reading assignments, students will gain the organizational skills, study skills, critical thinking skills, and analytical writing skills that are essential for success not only in science, but also in all academic endeavors. Topics covered include chemistry, cell biology, molecular biology, genetics, evolution and the evolutionary history of life, animal form and function, and ecology. The challenge of the course and the emphasis on critical thinking, study skills, and increased content knowledge prepares a student for college work. For prospective science majors, this course provides a solid foundation for higher-level science courses. For students interested in the physical sciences, this course provides the opportunity to study how the principles of physics and chemistry are applied to living systems. For students not interested in pursuing a collegiate science degree, this course provides an excellent opportunity to earn college credit to satisfy your degree programs' mandatory science requirement. **College credit earned is contingent upon passing the AP exam in May or through dual enrollment in Bio 160 (offered through GFC-MSU).**

Intro to Anatomy /Physiology (Science or CTE credit)

Prerequisite: Bio 1-2 with a 75% or higher & Intro to Health Occupations (Health Occ recommended but not required, may be taking concurrently), Medical Terminology recommended
Grade Level: 11, 12
Materials fees: \$15.00

During this course, the essential principles of human anatomy and physiology are presented through lecture and lab components, including basic chemistry, cell and tissues studies, and an overview of all the body systems. This course is intended to serve the needs as an introduction anatomy course for the allied health field. There will be some dissection in this course.

Anatomy and Physiology Honors (Science credit or CTE credit)

Length of Class: Year
Prerequisite: Bio. 1-2 with an 80% or higher
Grade Level(s): 11-12
Materials Fee: \$30.00

This lecture and laboratory based course introduces students to the structure and function of the human body. Topics such as the fundamental principles in organic and inorganic chemistry, cellular metabolism, cellular anatomy, cellular biology and histology will be covered and subsequently applied to the physiology of the body as a whole. Systems to be covered in this course include: integumentary, digestive, circulatory, lymphatic, immune, respiratory, urinary, nervous, sensory, musculoskeletal, endocrine and reproductive. Additionally, critical thinking/medical/case studies, global and environmental health, and disease entities will be incorporated into each system. Dissection is a component of this course. As such, those with an aversion to dissection should consider taking a different course. *Intro to Health Occ. & Medical Terminology are recommended & can be taken concurrently.*

General Chemistry and Honors Chemistry (Dual Credit)

Length of Class: Year
Prerequisite: Read Below
Grade Level(s) 11, 12
Lab Fee: \$20.00 (Honors only)

General Chemistry and Honors Chemistry both take a broad-view survey of the fundamental concepts of inorganic chemistry. These concepts include the nature of matter, atomic theory, quantum mechanics, chemical bonding, chemical naming, reaction classification, stoichiometry, laboratory practicum, and more. Both courses offer the same exposure to content, however Honors Chemistry supports theory with additional mathematical explanation. A minimum of a C in Algebra I is required. Detailed information for dual credit requirements will be given upon registration for class.

Any student with the intent of pursuing a college degree is strongly encouraged to experience chemistry during high school. Furthermore, any student with the intent of pursuing a science-based college degree should plan to take chemistry and another elective science as a junior, thus allowing for advanced science classes as a senior, such as Advanced Chemistry, Honors Physics or AP Biology. To ensure all students have an opportunity to be successful in their chemistry experience, all students enrolling in chemistry will be placed based upon individual success in previous MATH classes. **As such, Honors Chemistry is offered as a dual credit course with the University of Providence.**

Advanced Chemistry (Dual Credit)

Length of Class:	Year
Prerequisite:	Honors Chem. must have a 27 in math on ACT for dual credit
Grade Levels:	11, 12
Lab Fee:	\$25.00

Advanced chemistry is a full-spectrum in-depth course that is equivalent to college-level inorganic chemistry majors. This course will engage students with an in-depth, mathematical approach to investigating the fundamental principles of chemistry and is intended to be an extension of Honors Chemistry, as such, a strong mathematical background, coupled with a successful year in Honors Chemistry, are required for this class. As with all chemistry courses, Advanced Chemistry is supported by a full schedule of laboratory exercises thus requiring a \$25 lab fee. Lab fees must be paid no later than September 30. Attendance incentives do not apply to college level courses. **It is offered as dual credit with Montana Tech and reduced tuition is required within the first two weeks of each semester. However, this course can be taken as high school credit only, should a student not wish to enroll with MT Tech.**

Applied Physics (CTE)

Length of Class:	Year
Prerequisite:	Prep for Algebra/Biology/Freshmen Science or Instructor Approval
Grade Level(s):	11, 12

Applied Physics is a science course for students interested in the technical fields. This course is designed for the student who needs a broad understanding of physics and the ability to apply those principles in the work force. It is a lab-based approach to the concepts of force, work, rate, power, resistance, and energy as they may apply in mechanical, fluid, electrical, and thermal systems. A course taught, using both science and vocational facilities and materials. This course counts as either a career technical or science credit. It also serves as a prerequisite (may be taken simultaneously) for Auto Tech.

General Physics

Length of Class:	Year
Prerequisite:	Prep for Alg. with a C
Grade Level(s):	11, 12

Course for students who plan to continue their education post-secondary, but not necessarily as a science major. Topics include motion, forces, energy, waves, light electricity, and magnetism. Emphasis is on conceptual understanding with less math than Honors Physics.

Advanced Placement (AP) Physics 1- Dual Credit

Length of Class:	Year, 1 credit, students who fail 1st semester must drop the course unless they have teacher and/or administrative approval.
Prerequisite/ concurrently.)	Earth & Space Science, Algebra 1 and Alg. II/Trig with at least a "C" grade. (Can take Alg. II/Trig
Grade Level(s):	11, 12

AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore topics such as: Newtonian mechanics (including rotational motion), work, energy, power, collisions, simple harmonic motion, and fluids. AP Physics 1 has been designed as a course equivalent to the algebra-based college-level physics class. At the end of the course, students will have the opportunity to take the AP Physics 1 exam, which will test their knowledge of both the concepts taught in the classroom and their use of the correct formulas. **Dual credit is available through Great Falls College MSU.**

Advanced Placement (AP) Physics 2

Length of Class: Year
Prerequisite: AP Physics or a comparable introductory physics course & should have taken, or be concurrently taking, pre-calculus or an equivalent course.
Grade Level(s): 11, 12

AP Physics 2 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics by developing models of physical phenomena through inquiry-based investigations. Students build their understanding of physical models as they explore and solve problems in these topics: Thermodynamics, Electric Force, Field, and Potential, Electric Circuits, Magnetism and Electromagnetism, Geometric Optics, Waves, Sound, and Physical Optics, Modern Physics.

Geology

Length of Class: Year
Prerequisite: Freshmen Science/Biology 1-2
Grade Level(s): 11, 12

Geology is the study of the physical processes operating on and in the earth and the results of these processes through time. Topics include: plate tectonics, mineralogy, volcanism, geological time, and basic cosmology. Learn about Montana's geologic history and how geologic processes have created the spectacular scenery that makes Montana unique. From the rolling plains of eastern Montana to the rugged mountains in the west, this course will discuss various aspects of historical and physical geology.

Social Studies



Social Studies

Essentials of World History

Length of Class: Year
Prerequisite: None
Grade Level: 9

The course will examine European history, as well as the geography of the world.

Montana Government Studies

Length of Class: Semester
Prerequisite: None
Grade Level: 10

This class includes a study of Montana geography, climate and, demographics. A large history section covers Lewis and Clark, fur trappers, Indian removal, mining, ranchers, homesteaders, the Copper Kings, and early government. Government units cover local state, and tribal jurisdictions. Throughout the semester, readings by Montana authors or about famous Montanans are used. Students will be required to cover current event topics for the length of the class.

Sociology I (Soc. Studies elective)

Length of Class: Semester (1st)
Prerequisite: None
Grade Level: 11,12

The value of sociological imagination is to help students place peoples' lives and important events in broader social contexts by understanding how political, economic, and cultural forces constitute social life. The class will explore a variety of topics covered will include socialization, society, culture, race, ethnicity, gender, class stratification, deviance and crime.

Sociology II (Soc. Studies elective)

Length of Class: Semester (2nd)
Prerequisite: None
Grade Level: 11, & 12

Analyzes human interaction and studies the application of scientific methods in the observation and analysis of social change, norms, groups, intergroup relations, social stratification, institutions, and basic socialization processes other topics include but are not limited to economic and global inequality, families and intimate relationships, population, urbanization and environment, education, religion, collective behavior and mass social movements and globalization.

Psychology I (Soc. Studies elective)

Length of Class: Semester
Prerequisite: None
Grade Level(s): 11, 12

A study of the beginning principles of psychology and how they apply to everyday life. Theorists such as Freud and topics including sensory/perception, learning, memory, personality, intelligence, and psychological disorders will be covered. Class will revolve around class/group discussions, notes, and projects. **Five hours of volunteer/community service will be required.**

Psychology II (Soc. Studies elective)

Length of Class: Semester
Prerequisite: Psych I or Instructor Approval
Grade Level(s): 11, 12

Students will study theories of motivation, emotion, development, social psychology, and positive psychology, along with their applications to everyday life. Class will revolve around class/ group discussions, notes, in-class journals, and self-selected projects.

US History

Length of Class: Year
Prerequisite: None
Grade Level(s): 11

Provides a survey course of major events in United States history from the Age of Jackson to modern times.

AP US History (Dual Credit)

Length of Class: Year
Prerequisite: B or higher in English 3-4 or English 3-4H
Grade Level(s): 11, 12

This class provides a study of the political, diplomatic, social, economic, and cultural history of the US from colonization to the present with an emphasis on the causes and effects of major events. **Students will have the option of either taking the class for Dual Credit with GFC-MSU or the University of GF OR taking the AP exam in the spring.** There will be a fall and spring semester sign-up for the Dual Credit with GFC-MSU where students will earn three college credits each semester. Tuition fees are divided between the participating university and the student. Students must take either US History or AP US History to fulfill graduation requirements. Attendance incentives do not apply to College level courses without approval of the instructor. Attendance incentives do not apply to College level courses without approval of the instructor.

AP American Government (Dual Credit)

Length of Class: Year
Prerequisite: None, 3.3 GPA recommended and a keen interest in politics
Grade Level: 12

Students in this class should have the ability to write and enjoy researching and discussing. This course examines the major institutions of national government and politics with a special emphasis on the Constitution and other political rules of the game as shapers of public consciousness and government policy. Lecture material will be presented in conjunction with discussion of topics. Students will be required to demonstrate their analytical and critical thinking skills through essay assignments and briefs of two -four court cases. **Students will have the option of either taking the class for Dual Credit with GFC-MSU or the University of Great Falls - or taking the AP exam in the spring.** Tuition fees are divided between the participating university and the student. Students may earn three college credits through UGF or GFC-MSU and one high school credit. Students must pass the first semester to earn the required Government credit for graduation.

Government

Length of Class: Semester
Prerequisite: None
Grade Level(s): 12

Provides a study of American government, including the political process, national government, comparative political systems, and state and local governments.

CRIMINAL JUSTICE

The purpose of this course will be to explore the history, role, development, and philosophy of the criminal justice system in a democratic society. It will include an introduction to agencies and their functions in the administration of justice and career orientation. The course will examine some of the elements and players that comprise the criminal justice system and how they function together in their roles. Emphasized areas are written communication, decision-making skills, critical thinking, and creativity, flexibility, leadership and team membership. The primary means of presentation will be lecture-discussion, visual aids, videos, group work, and guest speakers.

CRIMINAL JUSTICE I

Length of class: Semester
Prerequisite: None
Grade level: 11, 12

The purpose of this course will be to explore the history, role, development, philosophy and theory of criminology and policing. The course will include an introduction to policing agencies and their functions in the administration of justice and career orientation. An examination of the role of the police in American society and examination of the various eras of policing in combination with the structure and style of various police agencies will also be covered. Agency application of internal and ethical issues including use of force will be examined along with strategies and policies to improve policing and the policing work environment will also be discussed.

Other Programs/Electives



- ~ *Yearbook Workshop*
- ~ *Psychology 100X (Dual Credit)*
- ~ *Exceptionalities*
- ~ *Transition*
- ~ *Movies and Audiences (FA)*
- ~ *Movies and Culture (FA)*
- ~ *Movies and Genre (FA)*
- ~ *Video Production (CTE or FA)*
- ~ *Video Production II (CTE or FA)*
- ~ *Video Production III (CTE or FA)*
- ~ *Video Production: Independent Study*
- ~ *(CTE) Internship*
- ~ *Sign Language (Dual Credit)*
- ~ *Vocabulary*
- ~ *Intro to Education (Dual Credit)*

Other Programs/Electives

Yearbook Workshop

Length of Class: Year
Prerequisite: Intro to Journalism &/or instructor permission 2.5 GPA recommended
Grade Level(s): 10, 11, 12 (9 w/permission from instructor)

This course may be taken for one or two periods per day; each hour is 0.50 credit per semester.

Students must have an interest in convergent media (print, social and web-based media), digital technology, current events, publishing and the composition processes and public relations and/or business practices. This workshop places students in individual staff positions with outlined job responsibilities based upon student applications. Editors and staff must meet, with no hesitation, the plant deadlines set by the professional yearbook company. This results in the mandatory distribution of the "Roundup" in May. Students must demonstrate self-motivation, completing specific job tasks independently or within a group dynamic. They must understand the time commitment in that before and after school time is mandatory. Staff members must show an ability to articulate ideas and problem-solve. It is highly recommended that editors schedule into two sequential periods. Staff members demonstrate these characteristics: observance of details, sincerity, the ability to critically listen and then, articulate concepts, integrity, leadership, reliability, truthfulness, honesty, diversity and dedication to the objective of publishing the yearbook in a financially sound, responsible and ethical manner.

Psychology 100X-Dual Credit- GFC-MSU

Length of Class: Year
Prerequisite: None
Grade Level(s): 11, 12

This course is an introduction to the nature and scope of the field of psychology and their applications to everyday life. Topics include: history and perspectives of psychology, the brain, sensation, perception, consciousness, development, learning, social psychology, memory, thinking, intelligence, motivation, emotion, personality, psychological disorders and treatment, stress, health, and positive psychology. Class will include discussion, notes, projects, open-note quizzes, and a final test. As a dual-credit course, students cannot be exempted from the final test.

Exceptionalities

Length of Class: Semester - Year
Prerequisite: Mandatory, written approval by teachers
Grade Level(s): 11, 12

Students will receive instruction in techniques of working with and learning about students in the high school with disabilities. Students are expected to attend regularly, be advocates for the students, maintain appropriate interactions, model good behavior and social skills, and complete required assignments.

Transition

Length of Class: Semester -Year
Prerequisite: placement by referral only
Grade Level(s): 9, 10, 11, 12

This class is designed to aide 9th through 12th graders in finding a pathway to success. Individual goals are discussed and a plan is designed for each student. The goal of Transition is to assist 9th grade students in earning five credits their freshman year. An additional goal is to assist 10th, 11th and 12th grade students in earning the appropriate credits to graduate from Great Falls High School. Students are admitted to Transition after criteria has been approved by administration, counselors and the Transition teachers. Credit may be granted at the end of each semester if the student fulfills class expectations

Movies and Audiences (FA or CT)

Length of class: Semester
Prerequisites: None
Grade Level(s): 9, 10, 11, 12

Open to students who share an interest in exploring and examining ways that movies have evolved with shifts in our culture. The course exams changes in how we watch movies as well as how audience members and their expectations shifted. From censorship to popular genres, movie producers have always tried to juggle art and money based upon what today's viewers want to see, how and where they want to see it, and what's happening in the world while a movie is being made. Essentially, the class explores how different genres of movies (such as comedy, action, horror, drama, etc.) have changed as audiences have evolved-sometimes for better, sometimes for worse. Students will view many short film clips, discuss artistic choices and cultural relevance, and reflect on the work both creatively and analytically. In short, the class will examine the past, present and future of how we, the viewers, both do and don't have a say in what ends up on the screen.

Movies and Culture (FA or CT)

Length of Class: Semester
Prerequisites: None
Grade Level: 9, 10, 11, 12

Open to students who share an interest in exploring and examining ways that movies have evolved from their origins to today's massive industry. The class will explore the invention of cinema, early to modern special effects, advances in story-telling, shifts in censorship, and some of the most important films and filmmakers of America and the world. Students will view many short film clips, discuss artistic choices and cultural relevance, and reflect on the work both creatively and analytically. Essentially, the class will trace the story of the movies and how they have affected—and been impacted by—our cultures, tastes and technologies.

Movies & Genre (FA or CT)

Length of Class: Semester
Prerequisites: None
Grade Level: 9, 10, 11, 12

Open to students who share an interest in exploring and examining how types of films have evolved over the past century. The course examines how different genres of movies (such as horror, comedy, science fiction, action, animation, musical/dance, war, crime, romance, etc.) have changed through the years. Students will view many short film clips, discuss artistic choices and cultural relevance, and reflect on the work both creatively and analytically. Essentially, the class will examine the trends and tropes of roughly a dozen genres of film.

Video Production I (CT or FA)

Length of Class: Semester
Prerequisites: None
Grade Level: 10, 11, 12

Video I focuses on both the artistic and practical aspects of filmmaking. Students will analyze camera shots and movements, editing techniques, story structure, storyboards and a few films. Once concepts have been explored, students will produce their own short films.

Video Production II (CT or FA)

Length of class: Semester
Prerequisite: Video Production
Grade Level: 10, 11, 12

Video II will expand upon the basics learned in Video I. Video II students will produce a series of projects of their choosing. Students will work with audio and sound beyond the basics of the introductory course. Students enjoy a broader spectrum of choice for project topic than in the introductory course.

Video Production III (CT or FA)

Length of class: Semester
Prerequisite: Video Production
Grade Level: 10, 11, 12

Open to students who have successfully completed Video Productions and Video 2. Students will continue to build their knowledge and technical skill of filmmaking to a more professional degree. Projects will focus on higher-skills and refinement in digital cameras, editing, and effects. Students will enjoy a broad range of freedom in project choice and design in order to learn to new skills and challenge themselves in meaningful ways.

Video Production: Independent Study (CT or FA)

Length of Class: Semester
Prerequisites: Video Production, Video Production II, and instructor approval
Grade Level: 10, 11, 12

Open to students who have excelled in first two video classes and want to go further into larger, more independent productions. Essentially, students will make their own short film about a subject of their interest, over the course of a semester. Students will pursue technical & artistic concepts and skills to a greater and more precise degree. The format is portfolio based; Students outline/pre-produce their idea, film it, and edit over the course of the semester. Face-to-Face time with instructor is scheduled to measure progress, provide feedback, and teach new skills. The course provides students who are committed and motivated the opportunity to design a project based on personal interest and challenge— for students who want to tackle a larger project to grow their skills.

Sign Language-Dual Credit

Length of Class: Semester (1st Semester only)
Prerequisite: None
Grade Level: 10, 11, 12

“Sign,” The third most used language, provides students an opportunity to familiarize themselves with deafness, the medical causes, ramifications and related professions. Students will develop a beginning proficiency in sign, be able to read and understand the deaf, and speak in front of a group. **Dual credit through Great Falls College-MSU.**

Vocabulary (This may be offered every other year)

Length of Class: Semester - Year
Prerequisite: None
Grade Level(s): 11, 12

Vocabulary development helps students expand their word base, prepare for SAT/ACT verbal tests, and create a framework for developing vocabulary in years to come. The course examines root stems, prefixes, suffixes, etymologies, frequently used foreign words, idioms, and derivatives. Topical reading, serendipitous verbal gifts gleaned from daily events, and interesting word histories complement fixed lists of words to master. Vocabulary Development is not a memorization factory (although memory does help), but rather a means to understanding the underlying systems of words and their meanings. Students who are taking the class for the first time have preference if class fills.

Intro to Education- CMR (Dual Credit)

Length of Class: Year
Prerequisite: None
Grade Level: 11, 12

This course provides an opportunity for students considering education as a career and is meant to be an introduction to American education with an emphasis on the teacher's role inside and outside the school, and the school's role in the community. Various educational issues will be examined; including the purposes of public education in America, the interplay between the public and it's schools, the interrelationship of curriculum, instruction, classroom management, school culture, and the challenges of responding effectively to diversity in the school setting and community. Credit completion includes a field experience in the school setting observing and attending school related meetings.

Dual Credit is available through Great Falls College-MSU.

