Billings Public School District

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Skyview High Administration – 281-5200

West High Administration – 281-5600

Career Center Administration – 281-5344

Early College and Advanced Opportunity – 281-6718

GRADUATION REQUIREMENTS

Montana High School Association Eligibility

1. The rules of the Montana High School Association fully govern the eligibility of any and all students with regard to participation in all forms of extra-curricular activity.
2. MHSA requires that students must have passed 20 hours of instruction per week in credited classes the previous semester for eligibility. Students are allowed to take two (2) classes that are not conducted within the brick and mortar of the school.
3. Only the grades of A, B, C, D, and P are passing grades. "F" and "IN" grades are NOT passing grades.
4. Summer school classes do not count toward eligibility.

Billings Public Schools Graduation Requirements

9th Grade Requirement
In order to ensure high school success, 9th grade students must be proficient in reading and math skills.
Required:
A 9th Grade student who scores below proficiency in reading upon exit from 8th grade will be required to take a reading class.
A 9th Grade student who scores below proficiency in math upon exit from 8th grade will be required to take Pre-Algebra.

To graduate from Billings Public Schools, a student shall have earned a minimum of (21) credits in grades nine through twelve from an accredited high school.

High School Graduation Requirements

4 credits in English
2 credits in Mathematics
1 credit in World History
1 credit in American History
½ credit in American Government
½ credit in a Social Studies elective
1 credit in Biology
1 credit in Earth Science or Physics or Chemistry
1 credit in Health and Physical Education
1 credit in the Visual or Performing Arts
1 credit in Career Technical Education
7 credits elective

High School Graduation Requirements

Beginning with the graduating class of 2027 students will complete ½ credit of Financial Literacy or Economics within the current requirements of 21 credits. Courses that will apply are:
-Personal Finance (½ credit CTE)
-Economics (½ credit Social Studies)
-Accounting (½ credit CTE)
*Career Center classes
*Jobs for Montana Graduates (½ credit CTE)
*Business Algebra (½ credit CTE, ½ cr Math)
*AP Macroeconomics (½ credit Soc. Studies)

21 credits will be required for graduation
To be graduated from a Billings high school, a student shall have been in attendance in grades 9-12 in an accredited high school for no fewer than eight (8) full semesters, unless an exception is granted by the Superintendent or their designee.

A student complying with the above meets the graduation requirements of the Montana State Board of Education. For complete requirements see School District Policy 2410.

Valedictorian Criteria

1. Honors and AP classes will be weighted. This means that those classes will be awarded an extra point in the GPA system. An A= 5, a B = 4, and a C = 3. D and F grades will remain D's and F's.
2. The student with the highest weighted grade point average after eight semesters of high school course work will be deemed valedictorian. In the case of a tie, multiple valedictorians will be recognized.
3. All students vying for valedictorian must earn at least 24 credits.
4. Of those 24 credits, all required courses for graduation must be completed.

For the purpose of determining valedictorian, High School GPA and Class Rank will be calculated at the end of eight (8) semesters as follows:

1. All weighted grades will be included first.
2. All non-weighted grades up to 24 credits will be included next.
3. If a student has more than 24 credits, any additional non-weighted A's will not be included.

· Grade Point Average (GPA) is based on four years of high school. Grades and credit from eligible classes taken prior to enrollment in high school will be reflected on the transcript, but not calculated in the GPA (i.e.Middle School Algebra 1 and Honors Geometry).

· The credit, if earned at middle school, will still be awarded. The course and grade will be reflected on the high school transcript.

· Class Rank: In the weighted system, GPA will be rounded to the nearest hundredths. Class rank and percent will be calculated on the rounded GPA. This protocol will compensate for variations in GPA beyond the nearest tenth due to students taking full or extended course schedules.

· Please visit with your child's counselor for assistance in completing college scholarships and/or college applications that ask for Class Rank and/or Class Percentile.

Graduation Academic Recognition: Students will be given academic recognition at graduation as follows:

Highest Honor: 3.9 or Higher GPA

High Honors: 3.89 -- 3.75 GPA

Honors : 3.74 -- 3.50 GPA

NCAA Clearinghouse

NCAA Freshmen-Eligibility Standards
Quick Reference Sheet
Know the Rules
Core Courses

For more information regarding the rules, please go to www.ncaa.org. Click on "Academics and Athletes" then "Eligibility and Recruiting." Or visit the Eligibility Center Web site at www.ncaaclearinghouse.net.
***Students are encouraged to visit with their High School Counselor.
***Please call the NCAA Eligibility Center if you have questions: toll-free number: 877-262-1492.

NAIA

Students who wish to attend NAIA Colleges as an athlete should visit the eligibility center at www.playnaia.com.

***Students are also encouraged to visit with their High School Counselor

Courses for Students with Special Needs

Grades 9, 10, 11, 12

Courses

+English 1
+English 2
+English 3
+English 4
+Math 1
+Math 2
+Math 3
+Math 4
+Reading
+Learning Strategies
+Basic Skills

Life Skills Courses

+Health
+Human Development
+Home Economics
+Practical Arts/Foods

Career and Vocational

+Career/Assessment
+Credit Job
+OJT
+Career Vistas 1
+Career Vistas 2
+Vista Crew
+VOC Training
+Occupation SKL
+Career/Explore
+Vocational Ed

Other Courses

+Communication Skills
+Social Issues
+English Skills
+BASE

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COMMUNICATION ARTS-ENGLISH

English Language Arts
The English program in Billings Public Schools concentrates on developing and refining students' skills in the areas of reading; writing; speaking and listening; language; and media and technology. The goal of the district's English program is to prepare students for entry-level, credit-bearing academic and college courses and/or for entry into the workforce. To that end, students complete coursework that helps them progress through increasingly complex literature and informational texts. Writing instruction focuses on developing the student's ability to develop and support logical arguments, to conduct and present research, to compose authentic narratives, and to inform and explain through written communication. In order to develop their reading and writing skills, students will participate in speaking and listening opportunities, grow their vocabularies, and hone their understanding and use of mechanics and conventions. Media and technology play an important role in this instruction, so the students will continue to develop skills related to the use of media and technology.

When it comes to text selection, the study of literature and informational texts provides the springboard for thoughtful analysis, for discussion, and for writing in various modes. Providing students a cross section of texts, including a strong core of literary classics, promotes students' understanding of their literary heritage and culture, which provides for a universal base in the English language. Honors courses at each level give students the opportunity to stretch their learning by choosing more rigorous academic challenges. Similarly, elective courses at the senior level provide opportunities for students to choose courses according to their college and career aspirations and/or their individual reading preferences.

Required readings are a part of our district curriculum. Objections to assigned reading should be brought to the attention of the teacher as alternate assignments may be available.

The Advanced Placement English Literature curriculum is subject to the approval of the College Board and is intended to provide students with a rigorous academic experience that prepares them for college-level reading, writing, and discussions. As stated by the College Board, "Issues that might, from a specific cultural viewpoint, be considered controversial, including references to ethnicities, nationalities, religions, races, dialect, gender, or class, are often represented artistically in works of literature […] Advanced Placement students should have the maturity, the skill and the will to seek the larger meaning [of texts'."

+English 1	**Credit 1**	**9, 10, 11, 12**
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: + English 1 is a remedial English program. It is governed by the student's IEP and focuses on improving skills in reading and writing.

Prerequisite Courses: None

Applies toward graduation requirements of: 4 English credits

English 1	**Credit 1**	**9**
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: English 1 is required of every freshman student who is not enrolled in Honors English 1.

Prerequisite Courses: None

Applies toward graduation requirements of: 4 English credits

Honors English 1	**Credit 1**	**9**
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Honors English 1 is a differentiated curriculum designed for students who are prepared to tackle rigorous academic challenges. Placement for Honors English 1 takes into consideration achievement information from standardized reading and language tests given in grades 7 and 8, teachers' recommendations, grade 8 English grades, completion of summer reading assignments, satisfactory performances on writing assessments, and a student's willingness to accept the challenge of this Honors English course.

Prerequisite Courses: Honors placement guidelines recommended

Applies towards graduation requirements of: 4 English credits

+English 2	Credit 1	10
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: +English 2 is a remedial English program. It is governed by the student's IEP and focuses on improving skills in reading and writing.

Prerequisite Courses: None

Applies toward graduation requirements of: 4 English credits

English 2	Credit 1	10
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: English 2 is required of every sophomore student who is not enrolled in an AP Seminar/English 2.

Prerequisite Courses: None

Applies toward graduation requirements of: 4 English credits

Honors English 2	Credit 1	10
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Honors English 2 is a differentiated curriculum developed for students who are prepared to tackle rigorous academic challenges. In addition to the students' willingness to accept the challenge of this Honors English course, placement for Honors English requires successful completion of Honors English 1, or exemplary completion of previous English classes and completion of summer reading assignments.

Prerequisite Courses: 1 credit in a freshman English course and honors placement criteria recommended.

Applies toward graduation requirements of: 4 English credits

AP Seminar/ English 2	Credit 1	10
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: AP Seminar/English 2 is an Honors English course for 10th graders that fulfills the English requirement and serves as the first step in the AP Capstone Diploma program. In this course, students analyze various texts, synthesize information from multiple sources, examine topics from different perspectives, and develop and defend arguments. They complete Honors-level assignments with a strong focus on critical thinking, reading, and writing.

AP Seminar allows students to explore their passions, potentially earn college credit, and prepare for future AP courses. It is a prerequisite for AP Research and part of the globally recognized AP Capstone Program.

Prerequisite Courses: 1 credit in a freshman English course

Applies toward graduation requirements of: 4 English credits

***See page 124 for more information about the AP Capstone Diploma**

+ English 3	Credit 1	11
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: +English 3 is a remedial English program. It is governed by the student's IEP and focuses on improving skills in reading and writing.

Prerequisite Courses: None

Applies toward graduation requirements of: 4 English credit

US Lit/US History Senior only	Credit 1 English Credit 1 Social Studies	11
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: The combination of American History and American Literature follows the curriculum and essential requirements currently established and approved by Billings Public Schools for English 3 and United States History. This American Studies approach encourages the students to appreciate and understand the links between the past events and the literature about and by those who experienced these events. As a result, students have the opportunity to examine complementary literary genres and historical periods in this unique course. Those who enroll in this block course are required to take both sections of the literature and history block both semesters.

TWO –HOUR BLOCK

Prerequisite Courses: 1 credit in a sophomore English course.

Applies toward graduation requirements of: 4 English credits, 3 Social Studies credits

English 3	Credit 1	11
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: English 3 is required of every junior student who is not enrolled in AP English Language and Composition or US Lit/US History Block (Senior High only).

Prerequisite Courses: None

Applies toward graduation requirements of: 4 English credits

AP English Language & Composition	Credit 1	11
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: The course cultivates reading and writing skills that students need for college success and for intellectually responsible civic engagement. The course guides students in becoming curious, critical, and responsive readers of diverse texts, becoming flexible, reflective writers of texts addressed to diverse audiences for diverse purposes...The reading and writing students do in the course deepen and expand their understanding of various formal and informal genres. Reading and writing activities in the course also deepen students' knowledge and control of formal conventions of written language.

This course focuses on rhetorical analysis and argument and is structured around the global idea of ethics and morality. The texts chosen for the course will be predominantly nonfiction. The reading selections will teach students to think and read critically and will also serve as models of academic and professional writing. This course may require purchase of some paperback materials and does require the completion of a summer reading assignment as per instructor's discretion.

Prerequisite Courses: One credit in a sophomore English course

Applies toward graduation requirements of: 4 English credits

College Literature/English 3	Credit 1 (½ Each Semester) 3 Credits @ City College and MSU Billings Main Campus	11
Course Name	**Semester 1 & 2 (Full Year Course)**	

Course Description: This course introduces students to the study of literature at the university level by engaging them in the careful reading and analysis of short and long fiction; narrative, dramatic, and lyric poetry; stage and cinematic drama; and selected audio/visual materials. Students will explore how craft, genre, and context shape meaning across a range of literary and visual texts. Through class discussion, quizzes, and a series of analytical essays, students will develop and demonstrate skills in close reading, contextual interpretation and comparative evaluation. The course is designed to build both the skills and habits of mind necessary to experience literature and related media for insight, understanding, and enjoyment.

Prerequisite Courses: No prerequisites

Applies toward graduation requirements of: 4 English credits

+English 4	Credit 1	12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: +English 4 is a remedial English program. It is governed by the student's IEP and focuses on improving skills in reading and writing.

Prerequisite Courses: None

Applies toward graduation requirements of: 4 English credits

AP English Literature & Composition	Credit 1	12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: In the AP English Literature and Composition course, students devote themselves to the study of literary works written in–or translated into–English. Careful reading and critical analysis of such literary works of fiction, drama, and poetry, selected locally by responsible educators, provide rich opportunities for students to develop an appreciation of ways literature reflects and comments on a range of experiences, institutions, and social structures. Students will examine the choices literary writers make and the techniques they utilize to achieve purposes and generate meanings. The course may require the purchase of some paperback materials, and it does require the completion of a summer reading assignment as per instructor's discretion.

Prerequisite Courses: 1 credit in a junior English course

Applies toward graduation requirements of: 4 English credits

English 4	Credit 1	12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: English 4 is required of every senior student not enrolled in another equivalent senior year English course. The focus is on college and career readiness skills.

Prerequisite Courses: None

Applies toward graduation requirements of: 4 English credits

College Writing/English 4	Credits 1 (½ Each Semester) 3 Credits @ City College and MSU Billings Main Campus	12
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: This course covers the Billings Public Schools English 4 curriculum and integrates and provides instruction in writing competencies expected of college students. It pays special attention to writing as a problem-solving process, patterns of organization in personal and informative writing, and logical thinking and style in argumentative/persuasive writing. Students are immersed in the writer's workshop classroom model through writing and responding to writing (their own and from other authors) on a daily basis. It is the equivalent to Writing 101 which is offered at City College at MSU-Billings and MSU-Billings. This is a concurrent enrollment course and students will be required to test into it in order to receive college credit. Other requirements may apply. Please contact your counselor for additional information.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

City College/MSU Billings and MSU Billings: 3 credits in WRIT 101 will be issued to students who pass the College Writing/English 4 class and complete all WRIT 101 competencies.

Prerequisite Courses: Successful completion of English 3 and a qualifying score on either the Accuplacer Exam or the ACT

Applies toward graduation requirements of: 4 English credits

HEALTH AND PHYSICAL EDUCATION

All students need to take one credit in Health Enhancement 1 to graduate.
Students may take additional Health & Physical Education classes from the following:

Activities
9, 10, 11, 12

****Fitness Conditioning**
9, 10, 11, 12

****Weight Training**
9, 10, 11, 12

****Advanced Activities**
11, 12

****Community Fitness**
11, 12

Introduction to Officiating and Coaching Youth Sports
11, 12

****Lifetime Skills**
11, 12

Sports Medicine
11, 12

****Unified Physical Education**
****Reg. Ed. 10, 11, 12**
****Spec. Ed. 9, 10, 11, 12**

**** Indicates a course that can be taken more than once for credit**

Health Enhancement 1	**Credit 1**	**9, 10, 11, 12**
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Health Enhancement 1 is a two semester course which meets daily and combines the delivery of health education into one curriculum which emphasizes health, fitness, wellness and social responsibility. This course includes all of the components of a Health Education Curriculum and those of Physical Education.

Prerequisite Courses: None
Applies toward graduation requirements of: 1 Health Enhancement and Physical Education credit

Activities	**Credit ½**	**9, 10, 11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Activities is a one semester elective course offered at the freshman and sophomore year. This course was designed as an *introduction* to individual and team sports emphasizing sportsmanship and enhancing the concepts of working cooperatively as a group. Students will also develop goals related to personal fitness and lifelong health.

Prerequisite Courses: None
Applies toward graduation requirements of: 7 Elective credits

Fitness Conditioning	**Credit ½**	**9, 10, 11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Through the basic concepts of strength and cardiovascular conditioning, the students learn the importance of lifetime fitness as they assess their own fitness levels, develop personal fitness goals, and monitor their progress. This course is designed for students who want to develop personal weight/fitness goals.

Prerequisite Courses: None
Applies toward graduation requirements of: 7 Elective credits

Weight Training	**Credit ½**	**9, 10, 11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course offers students the opportunity to develop a higher level of aerobic fitness and strength necessary for competing in high school athletics or post secondary pursuits. The students will learn and develop several techniques used to improve athletic skill, strength and flexibility. With the use of free weights, plyometerics, agility and cardiovascular exercises, students will enhance their basic and skill related fitness components. This course is extremely demanding with mandatory attendance, participation and effort. Proper clothing is a daily requirement.

Prerequisite Courses: None
Applies toward graduation requirements of: 7 Elective credits

Advanced Activities	**Credit ½**	**11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Advanced Activities is a one semester elective course offered at the junior and senior year. The curriculum is designed to explore and expand team and dual sports emphasizing sportsmanship and enhancing the concepts of working cooperatively as a group. Students will also develop goals related to personal fitness and lifelong health. This class may meet off campus multiple times per week.

Prerequisite Courses: Health Enhancement 1
Applies toward graduation requirements of: 7 Elective credits. *Students must provide own transportation. Fees are required.*

Community Fitness	**Credit ½**	**11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This semester long course combines a variety of fitness and exercise components. Students learn the importance of lifetime fitness as they assess their own fitness levels, develop personal fitness goals, and monitor their progress. This class may meet off campus multiple times per week.

Prerequisite Courses: Health Enhancement 1
Applies toward graduation requirements of: 7 Elective credits. *Students must provide own transportation. Fees are required.*

Introduction to Officiating And Coaching Youth Sports	**Credit ½**	**11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course is designed to teach students the basics of officiating and/or coaching sports. Students will learn basic concepts of officiating associated with learning how to become a beginning MOA official. This class will include classroom, lab and hands on sessions with active MOA officials from the community.

Prerequisite Courses: Health Enhancement 1
Applies toward graduation requirements of: 7 Elective credits

Lifetime Skills	**Credit ½**	**11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Lifetime Skills is a one semester course for elective credit offered at the junior and senior year. The curriculum is designed to explore and expand leisure activities with a goal of developing overall health and fitness personal goals. This class may meet off campus multiple times per week.

Prerequisite Courses: Health Enhancement 1
Applies toward graduation requirements of: 7 Elective credits. *Students must provide own transportation. Fees are required.*

Sports Medicine	Credit ½	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course is designed to teach the student basic human anatomy, physiology and kinesiology as it relates to exercise and athletics. Students will learn basic concepts of injury prevention, recognition and rehabilitation as well as conditioning and athletic nutrition. The course is based on a lecture/discussion format and will include hands-on laboratory sessions with periodic professional speakers from the field of sports medicine. This course helps prepare students to be trainers within the high school athletic programs.

Prerequisite Courses: Health Enhancement 1

Applies toward graduation requirements of: 7 Elective credits

Unified Physical Education	Credit ½	Reg. Ed. 10, 11, 12 Spec. Ed. 9, 10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: The Unified PE course brings together students with and without disabilities for physical activities and sports, with the goal of enhancing the physical, intellectual, and social growth of all. The class focuses on increasing physical fitness and sport-specific skills, rules, and strategies. It also reinforces positive habits and reasoning to make better health and lifestyle choices. Students will work to increase competence and confidence in a variety of physical activities. The teacher will facilitate a learning atmosphere in which typically developing peers learn to better understand their classmates' needs and learn to find creative ways to adapt instruction. This class naturally fosters new friendships among the Unified PE classmates and promotes students' leadership and social competencies. In Unified PE, individualism and inclusion naturally coexist. The environment is rich in encouragement, trust, and lasting friendships.

Prerequisite Courses: None

Applies toward graduation requirements of: 7 Elective credits

MATH

Recommended Mathematics Course Paths--Refer to specific school for more information

Current Course	Logical Next Course	Other Optional Courses
Pre-Algebra	Algebra 1	
Algebra 1	Geometry	
Geometry	Algebra 2 (C's or better in Alg1 & Geometry)	Interm. Alg if less than C's in Alg 1 or Geo
Honors Geometry	Honors Algebra 2	Regular Alg 2 if less than B's in Hon Geo
Intermediate Algebra	Algebra 2	
Algebra 2	Pre-Calculus	College Algebra (ACT 22 or Accuplacer)
		Statistical Reasoning
Honors Algebra 2	AP Pre-Calculus	Regular Pre-Calc if less than B's in Hon Alg 2
Pre-Calculus	AP Calculus or AP Statistics	
AP Pre-Calculus	AP Calculus and/or Statistics	
College Algebra (Semester)	College Trig or College Stats	Graduate
AP Statistics	Graduate	
AP Calculus AB	Graduate or AP Calculus BC	

- In the high school math progression, a full year of Algebra is a prerequisite for Geometry; a full year of Geometry is a prerequisite for Algebra 2, etc.
- Students take only one math class at a time with the exception of AP Statistics.
- Math placement criteria involves not only NWEA scores, but also successful completion of prerequisite math courses.
- If math placements are to be corrected, this should take place in September - students cannot move up a math level (Pre-Algebra to Algebra 1 or Algebra 1 to Geometry) at the semester as they will have missed the concepts and skills taught during first semester. This gap in skills and knowledge will create problems for students when they move on to Geometry, Algebra 2,
- and higher levels of math.

+ Math 1 - 4	Credit 1 per Level	9, 10, 11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: + Math is a remedial program. It is governed by the student's IEP; the program focus is to remediate skills in number concepts and computation. Students will demonstrate competencies in required math skills and related activities and will express themselves through oral and written problem solving.

Prerequisite Courses: None

Applies toward graduation requirements of: 2 Math credits or 7 Elective credits

Pre-Algebra	Credit 1	9
Course Name	**Semester 1 and/or 2**	**Grade Level**

Course Description: Pre-Algebra provides learners with an opportunity to review and study foundational topics for Algebra 1. Students learn about slopes of lines, various applications and representations of linear equations and functions, and informal strategies to solve problems involving systems of linear equations in two variables. Further, they learn how to explore data sets by organizing, modeling, interpreting, describing and making predictions. Finally, they learn how to analyze two-and three-dimensional spaces and figures. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

Prerequisite Courses: Per placement criteria

Applies toward graduation requirements of: 2 Math credits

Algebra 1	Credit 1	9, 10
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: The fundamental purpose of this course is to formalize and extend the mathematics that students learned in the middle grades. Algebra 1 deepens and extends understanding of linear relationships, in part by contrasting them with exponential and quadratic phenomena, and in part by applying linear models to data that exhibit a linear trend. Students engage in methods for analyzing, solving, and using linear, exponential, and quadratic functions. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

Prerequisite Courses: Pre-Algebra

Applies toward graduation requirements of: 2 Math credits

Algebra 1 **Business Algebra**	**Credits 2** **1 Math - 1 Career Technical Education**	**9, 10**
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: Algebra 1 courses include the study of properties and operations of the real number system; evaluating rational algebraic expressions; solving and graphing first degree equations and inequalities; translating word problems into equations; operations with and factoring of polynomials; and solving simple quadratic equations.

Geared for students with an interest in marketing, sales, or small business operation, marketing career exploration courses expose students to the opportunities available in retail, wholesale, advertising, and other occupational fields using marketing principles.

Business Algebra would enable students a hands-on Algebra course which would enable them to grasp Algebra concepts through the frame of business. This is a partner course to the Career Center's Geometry in Construction which has been very successful in enabling students who otherwise struggle with conceptualizing math, an avenue to view concepts in a more concrete way.

This class can be utilized not only here at the Career Center but in the home high schools as well. Additionally, this class may qualify for students needing to complete financial literacy requirements.

TWO HOUR BLOCK

Prerequisite Courses: PreAlgebra

Applies toward graduation requirements of: 2 Math credits and 1 Career Technical Education credit

***This course applies to the Financial Literacy credit for graduation.**

Geometry	**Credit 1**	**9, 10, 11**
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Geometry students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. Transformations are emphasized. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

Prerequisite Courses: Algebra 1

Applies toward graduation requirements of: 2 Math credits

Honors Geometry	Credit 1	9, 10, 11
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Honors Geometry includes all the subject content of the regular geometry course but more emphasis is given to trigonometry. Honors mathematics students need to have strong number sense, a strong algebraic background and be motivated self-learners. Chapter projects take the students into real world applications of mathematics and may require time outside of class to complete. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

Prerequisite Courses: Algebra 1 and test scores meeting placement criteria

Applies toward graduation requirements of: 2 Math credits

Intermediate Algebra	Credit 1	10, 11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Intermediate Algebra is for students who need a bridge course prior to Algebra 2 following the completion of Geometry. This course reviews essential Algebra 1 topics and prepares students for success in Algebra 2. Topics include field properties and theorems, set theory, solving systems of linear equations and inequalities, solving and graphing quadratics and the use of technology.

Prerequisite Courses: Geometry

Applies toward graduation requirements of: 2 Math credits or 7 Elective credits

Algebra 2	Credit 1	10, 11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Algebra 2 students extend their repertoire of functions to include polynomial, rational, and radical functions. They expand their study of right triangle trigonometry to model periodic phenomena. Students work closely with expressions that define the functions and continue to expand and hone their abilities to model situations and solve equations over the set of complex numbers. The Mathematical Practice standards apply throughout each course and, together with content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

Prerequisite Courses: Geometry or Honors Geometry

Applies toward graduation requirements of: 2 Math credits or 7 Elective credits

College Algebra (Math 121)	Credit ½	11, 12
Course Name	**Semester 1**	**Grade Level**

Course Description: College Algebra is a rigorous course that analyzes and interprets the behavior and nature of functions including linear, quadratic, polynomial, rational, exponential, logarithmic, power, absolute value, and piecewise-defined functions. Additional topics include systems of equations, matrices, and making decisions using probability. This course qualifies for Dual Enrollment Credit through Montana State University-Billings. Students must pass entrance requirements and pay course fees for MATH 121.

Prerequisite Courses: Algebra 2 and qualifying test score on the ACT Math Test or the Accuplacer Exam.

Applies toward graduation requirements of: 2 Math credits

College Trigonometry (Math 122)	Credit ½	11, 12
Course Name	**Semester 2**	**Grade Level**

Course Description: Trigonometry is often considered a “gateway” course because its content is necessary for further study in upper level mathematics and the sciences. Topics covered in Trigonometry include: the unit circle, trigonometric functions (definitions, graphs, and inverses), right and oblique triangles, trigonometry identities, trigonometric equations the trigonometric form of complex numbers, two-dimensional vectors, polar coordinates, and parametric equations. This course qualifies for Dual Enrollment Credit through Montana State University-Billings. Students must pass entrance requirements and pay course fees for MATH 122.

Prerequisite Courses: Math 121

Applies toward graduation requirements of: 2 Math credits or 7 Elective credits

Honors Algebra 2	Credit 1	10, 11
Course Name	**Semester 2**	**Grade Level**

Course Description: Honors Algebra 2 includes all the subject content of the regular Algebra 2 course but more emphasis is given to algebraic modeling, functions, matrices, trigonometry, sequence and technology to prepare students for other courses in the honors mathematics sequence. Honors mathematics students need to have strong number sense, a strong algebraic background and be motivated self-learners. Chapter projects take the students into real world applications of mathematics and may require time outside of class to complete. Students analyze data and connect mathematics topics. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

Prerequisite Courses: Geometry (with department head or administrator approval) or Honors Geometry

Applies toward graduation requirements of: 2 Math credits or 7 Elective credits

Statistical Reasoning	Credit 1	11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

The purpose of this course is to provide a class that introduces students to statistical reasoning in a context that is rich with examples likely to spark their interests. From the very first lesson, students will be using real data to answer interesting questions and provide real-world applications to better engage in learning. As a result of this class, students will be able to formulate statistical questions of their own and identify and analyze statistical claims made by others. Students will understand the role of variability in the data collection process and incorporate this understanding when drawing conclusions about statistical questions. Finally, students will be able to critically reflect on their own conclusions and the limitations of how the data can inform their conclusions.

The course offerings in each high school may take a generalized approach or a specific topical focus for the duration of the course (i.e. Sports Statistics, Music, and Media Statistics, etc.). For more information and possible course topics, please refer to your school's course syllabus.

Prerequisite Courses: Algebra 2 is recommended

Applies toward graduation requirements of: 2 Math credits or 7 Elective credits

Precalculus	Credit 1	11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Precalculus students focus on standards to prepare students for a more intense study of mathematics. They expand their study of circles and parabolas to other conics. Trigonometric functions are further developed to include inverses, general triangles, and identities. Matrices provide an organizational structure in which to represent and solve complex problems. Students expand the concepts of complex numbers and the coordinate plane to represent and operate upon vectors. Probability rounds out the course using counting methods, including their use in making and evaluating decisions. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

Prerequisite Courses: Algebra 2 or Honors Algebra 2

Applies toward graduation requirements of: 2 Math credits or 7 Elective credits

AP Pre-Calculus	Credit 1	10, 11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: AP Precalculus centers on functions modeling dynamic phenomena. This research-based exploration of functions is designed to better prepare students for college-level calculus and provide grounding for all mathematics and science courses. In this course, students study a broad spectrum of function types that are foundational for careers in mathematics, physics, biology, health science, social science, and data science.

During this course, students acquire and apply mathematical tools in real-world modeling situations in preparation for using these tools in college-level calculus. Modeling, a central instructional theme for the course, helps students come to a deeper understanding of each function type.

Throughout this course, students develop and hone symbolic manipulation skills needed for future mathematics courses. They also solve equations and manipulate expressions for the many function types throughout the course.

AP Precalculus fosters the development of a deep conceptual understanding of functions.

Prerequisite Courses: Algebra 2 (with department head or administrator approval) or Honors Algebra 2

Applies toward graduation requirements of: 2 Math credits or 7 Elective credits

AP Calculus AB	Credit 1	11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: AP Calculus is a college-level course that provides students with an understanding of the concepts of calculus and experience with its methods and applications. This course is also designed to prepare students for the AP Calculus exam. Topics include analysis of functions, limit theory, derivatives and integrals.

Prerequisite Courses: AP Precalculus

Applies toward graduation requirements of: 2 Math credits or 7 Elective credits

AP Calculus BC	Credit 1	12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: AP Calculus is a college-level course that provides students with an understanding of the concepts of calculus and experience with its methods and applications. This course is also designed to prepare students for the AP Calculus BC exam. Topics include analysis of functions, limit theory, derivatives and integrals, infinite series,and parametric equations.

Prerequisite Courses: AP Calculus AB

Applies toward graduation requirements of: 2 Math credits or 7 Elective credits

AP Statistics	Credit 1	12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: AP Statistics is a college-level course that introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will learn exploring data, planning a study, anticipating patterns, and statistical inference. This course is also designed to prepare students for the AP Statistics exam.

Prerequisite Courses: Algebra 2 or Precalculus (with department head or administrator approval) or AP Precalculus

Applies toward graduation requirements of: 2 Math credits or 7 Elective credits

College Introduction	Credits ½	
To Statistics	4 Credits @ MSU Billings	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: College Introduction to Statistics covers descriptive techniques, probability distributions, and statistical inference of one and two sample tests and associated confidence intervals for means and proportions and linear regression. Introduces statistical analysis using technology. This course qualifies for Dual Enrollment Credit through Montana State University-Billings. Students must pass entrance requirements and pay course fees.

MSU-Billings: 4 credits in STAT 216 will be issued to students who pass the College Introduction to Statistics and complete all STAT 216 competencies.

Prerequisite Courses: Algebra 2 and qualifying test score on the ACT Math Test or on the Accuplacer Exam.

Applies toward graduation requirements of: 2 Math credits or 7 Elective credits

SCIENCE

Science courses allow students to gain knowledge and an understanding of the world of nature. Our lives are greatly influenced by those who study and work in science areas.

Coursework can vary from the required two credits to four or more credits for those who wish to explore many disciplines of science. Whether students plan to attend college or pursue a technical career, they are encouraged to explore the sciences each year of high school.

Graduation requirements include one credit in biological science and one credit of physical science. Please see course descriptions for specific prerequisites and/or mathematics requirements.

Course Options in Science by Grade Level

Grade 9	Grade 10	Grades 11, 12
*Earth Science	*Biology 1	*Chemistry or Honors Chemistry
*Honors Earth Science	*Honors Biology 1	*Biology 2
*Biology 1 (Health Science Students)	*Chemistry	*Human Anatomy & Physiology
*Honors Biology 1 (Health Science Students)	*Honors Chemistry	*Anatomy & Physiology/Applied Medicine
		*Environmental Science
		*Geology
		*Physics 1
		*AP Biology
		*AP Chemistry (2nd Year Course)
		*AP Physics
		*AP Physics 2

Earth Science	Credit 1	9
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Earth Science is a one-year laboratory course in which the students will investigate the areas of Geology, Meteorology, Astronomy and Hydrology. Earth Science will strengthen the students basic investigative skills, enhance their ability to process information, and prepare them to make rational decisions concerning humans' interactions on Earth.

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Physical Science credit

Honors Earth Science	Credit 1	9
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Honors Earth Science can expect a more challenging, rigorous curriculum that focuses on greater depth of topics and concepts, higher level questions, and intrinsic motivation on the part of the student. Students will be expected to do formal laboratory write-ups, reading outside of class, and use math for data analysis.

Prerequisite Courses: Must meet established placement criteria: Must have at least a B average in Physical Science for the first three quarters, Spring Reading RIT of at least 230, Spring Math RIT of at least 244

Applies toward graduation requirements of: 1 Physical Science credit

Biology 1	Credit 1	9, 10, 11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: This is an introductory survey course into the animal and plant kingdoms. Students will study the chemical basis of life and survey the diversity of living things. The course includes dissection for the study of anatomy.

Prerequisite Courses: None.

Note: There are no math requirements for Biology 1, but 9th Graders in Biology or Honors Biology are recommended to be in or have completed Geometry in order to meet the math requirements the following year in Chemistry and Physics.

Applies toward graduation requirements of: 1 Biology Science credit

Honors Biology 1	Credit 1	9, 10
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Honors Biology 1 can expect a more challenging, rigorous curriculum that focuses on greater depth of topics and concepts, higher level questions, and intrinsic motivation on the part of the student. Students will be expected to do formal laboratory write-ups, reading outside of class, and use math for data analysis.

Prerequisite Courses: Same prerequisites as Biology 1 and must meet established placement criteria: Spring Reading RIT of at least 232, Spring Math RIT of at least 248. Ninth grade students must have completed or are concurrently enrolled in Geometry.

Applies toward graduation requirements of: 1 Biology Science credit

AP Biology	Credit 1	11,12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: AP Biology is an introductory college-level biology course. There is a strong emphasis on descriptive writing in this course, as well as further development of lab skills. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes - energy and communication, genetics, information transfer, ecology, and interactions.

Prerequisite Courses - Biology 1 and Chemistry

Applies toward graduation requirements of: 1 Biology Science credit or 7 Elective credits

Biology 2	Credit 1	11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Biology 2 has two major objectives. The first is to provide students with the opportunity to engage in a variety of lab-based activities such as recombinant DNA technology, fruit fly genetics, and ecosystem analysis. The second objective is to provide students with an in-depth and up-to-date coverage of major biological concepts. The motivated student will find Biology 2 to be a great help in making the transition into college level biology courses.

Prerequisite Courses: This course is designed for students who have earned credits in Biology 1 and Physical Science.

Applies toward graduation requirements of: 1 Biology Science credit or 7 Elective credits

Chemistry	Credit 1	10, 11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: The chemistry course presents a modern approach to the principles of chemistry at a level suitable for the majority of high school students. The course has been developed within the framework of certain unifying concepts such as the chemical bond, the structure of matter, the matter-energy relationships, the periodicity of elements, the mole concept, chemical notation, the behavior of matter in terms of acidity, oxidation-reduction, chemical reactions, stoichiometry and chemical equations. The student is encouraged to think and reason independently.

Prerequisite Courses: This course is designed for students who have earned credits in Biology. Students may take this class if they have completed Algebra 1 and Algebra 2 with a "C" grade or better, or have completed Algebra I with a "C" grade or better and are concurrently enrolled in Algebra 2.

Applies toward graduation requirements of: 1 Physical Science credit **or** 7 Elective credits

Honors Chemistry	Credit 1	10, 11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Honors Chemistry is a first year course with emphasis on mathematical concepts in Chemistry. It covers the same topics as Chemistry and develops problem solving skills. In addition to an in depth study of the core curriculum, students will explore additional topics and labs.

Prerequisite Courses: This course is designed for students who have earned credits in Biology with a "B" grade or better and completed Algebra 2 with a "B" grade or better. Students may take this class if they are concurrently enrolled in Algebra 2 and have completed Algebra 1 with a "B".

Applies toward graduation requirements of: 1 Physical Science credit or 7 Elective credits

AP Chemistry	Credit 1	11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: AP Chemistry is a second year course, and provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations, as they explore topics such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium.

Prerequisite Courses - Chemistry or Honors Chemistry

Applies toward graduation requirements of: 1 Physical Science credit or 7 Elective credits

Geology	Credit ½ each semester	11, 12
Course Name	**Semester 1 and/or 2**	**Grade Level**

Course Description: Geology focuses on mineral and rock development and how natural forces cause these materials to develop the many landforms found on Earth. Topics of study include rocks and minerals, erosion, sedimentation, glaciers, volcanoes, earthquakes, plate tectonics, map reading, and interpreting Earth's history. Local, state, and national sites of geologic significance and current geologic events will be explored.

Prerequisite Courses: Completed Earth Science and Biology with a "C" or better, or instructor approval. Not a replacement course for Earth Science.

Applies toward graduation requirements of: 7 Elective credits

Environmental Science	Credit ½ each semester	11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Environmental Science is designed to enhance the student's understanding of basic ecological principles and how they relate to the human situation. Students will explore such topics as endangered species, water and air quality, global warming, the greenhouse effect, and population. They will be challenged with field experience, hands-on investigations and research activities. Guest speakers may include professional scientists and local experts. At times the class will meet off campus to do field study. Each semester covers different topics. Students may elect to take one or both semesters.

Prerequisite Courses: This course is designed for students who have earned 2 science credits (Biology and a physical science). **Skyview students**: Semester 1 is a prerequisite to Semester 2.

Applies toward graduation requirements of: 7 Elective credits

Human Anatomy & Physiology	Credit 1	11, 12
Course Name	**Semester 1 and/or 2**	**Grade Level**

Course Description: This course provides a comprehensive introductory level approach to the structure and function of the human body. A lecture/laboratory format is used to study the major systems of the body with an attempt to integrate anatomy and physiology in a way that reinforces the inseparable relationship between structure and function. The course is designed for those students considering careers in allied health fields. Students may elect either or both semesters. Students who are enrolled in Medical Careers or Sports Medicine are encouraged to take this course second semester. Otherwise, it is recommended to take this course both semesters. At times the class will meet off campus to do field study. Dissection labs are an emphasis of second semester.

Prerequisite Courses: Biology 1 and a physical science

Applies toward graduation requirements of: 7 Elective credits

Course Name	Semester 1 or 2	Grade Level
Anatomy & Physiology **Applied Medicine/Med. Careers (Career Center)**	**Credit 1** **½ Biology and** **½ Career Technical Education**	**12**

Course Description: Medical Careers gives seniors an inside look at the world of medicine through hands-on learning, real-world experiences, and professional certifications. Students dive into anatomy and physiology, explore a variety of healthcare career pathways, and gain valuable experience through clinical rotations at three local medical facilities. In this immersive course, students step into hospital and clinical settings to observe healthcare professionals in action,learning what it takes to thrive in professional medical environments. Along the way, they'll earn certifications in Basic Life Support (BLS), First Aid, and Stop the Bleed, building essential skills for both college and career readiness. Med Careers offers a unique opportunity to discover your passion, connect classroom learning with real-life practice, and prepare for the next step in your healthcare journey. Strong attendance and active participation are key to making the most of this exciting experience.

Dual Credit Option: High school students have the opportunity to earn both high school and college credit through Highlands College by enrolling in HTH 101: Opportunities in the Health Professions.

Essential Requirements:

- Strict adherence to HIPAA based confidentiality
- Adherence to hospital professional dress code
- Practice universal precautions
- Attendance to hospital rotations is mandatory
- Students must provide own transportation to hospital orientations and rotations
- Students must follow all hospital protocols and policies.
- Strict adherence to professionalism.

TWO HOUR BLOCK

Prerequisite Courses: Completion of 3 science credits. Must provide your own transportation.
*Students may take this course concurrently with College Emergency Medical Technician.

Applies toward graduation requirements of: 1 Biology or 7 Elective credits and
1 Career Technical Education credit

Physics 1	Credit 1	10, 11, 12
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: Physics 1 is a full-year, laboratory science elective. This course emphasizes project-based learning across core physics topics. Students explore the principles of 1 and 2 dimensional motion, Newton's laws, circular motion and gravitation, fluids and buoyancy, energy, momentum and impulse, and waves. Each unit challenges students to apply physics concepts through hands-on projects and labs, requiring both individual work and collaborative group problem-solving. This approach builds not only physics knowledge but also critical thinking, teamwork, and practical skills, preparing students to understand and apply physics in real-world contexts.

Prerequisite: It is highly recommended that students have completed Algebra 2. It is highly recommended that the student has earned a C or higher in Algebra 1, Geometry, and Algebra 2 courses. Students who are concurrently enrolled in Algebra 2 may take the course with teacher approval. It is highly recommended that the student earned a C or higher in their previous lab-based science courses.
Applies toward graduation requirements of: 1 Physical Science credit or 7 Elective credits

AP Physics	Credit 1	10, 11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: 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 these topics: Kinematics; dynamics; circular motion and gravitation; energy; momentum; simple harmonic motion; torque and rotational motion; electric charge and electric force; DC circuits; and mechanical waves and sounds.

Prerequisite Courses: Geometry and either completion or concurrent enrollment in Algebra 2
Applies toward graduation requirements of: 1 Physical Science credit or 7 Elective credits

AP Physics 2	Credit 1	11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: This course is an Algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: fluids; thermodynamics; electrical force, field, and potential; electric circuits; magnetism and electromagnetic induction; geometric and physical optics; and quantum, atomic, and nuclear physics. AP Physics 2 is a full-year course that is the equivalent of a second-semester introductory college course in algebra-based physics.

This course requires that twenty-five percent of instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to demonstrate foundational physics principles and apply the science practices.

Prerequisite Courses: AP Physics 1 and should have taken or be concurrently taking pre-calculus.
Applies toward graduation requirements of: 7 Elective credits

SOCIAL STUDIES

Mission

Today's students more than ever before need a comprehensive understanding of the world and of the many cultures that have developed ideas, institutions, and ways of life. Students can gain an appreciation of both the world's many cultures and their shared humanity and common problems.

Social Studies Course Structure

10th Grade

World History

Advanced Placement World History

11th Grade

United States History

Advanced Placement United States History

United States Lit/United States History Block - Senior Only

College American History 1 & 2 - Career Center Only

12th Grade

United States Government

Advanced Placement United States Government

College American Government

Other Social Studies Offerings for 12th Grade

Montana History

Economics

AP Macroeconomics - Career Center Only

Psychology

Sociology/College Sociology

20th Century Genocide (West High Only)

AP Psychology

College Intro to Psychology - Career Center Only

Native American Studies

College Native American Studies

World History	Credit 1	10
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Knowledge of major historical events and accomplishments is necessary to understand current national and international affairs. This course stresses the diversity of economic, political, religious, and social systems; it encourages an appreciation for the scientific and artistic contributions of many cultures to the collective wisdom of the human race. The first semester concentrates on ancient civilizations and western medieval history. The second semester emphasizes those events which predominantly shaped the modern world.

Prerequisite Courses: None

Applies toward graduation requirements of: 1 World History credit

Advanced Placement

World History	Credit 1	10
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Advanced Placement World History is a rigorous study of human interaction from 1200 C.E. to the present. This course will examine the integration of social, political, environmental, cultural and economic factors as we study the development of human societies. The focus of the course is truly global, and will include a balanced approach to Asia, Africa, Oceania, Europe and the Americas. AP World History offers an approach that lets students "do history" by guiding them through the steps a historian would take in analyzing historical events and evidence worldwide. College level reading and writing skills will be developed through critical evaluation of primary and secondary sources. Students will have the opportunity to earn college credit through the Advanced Placement examination process at the end of the school year.

This course will address the following areas of study:

- Development and transformation of social structures
- Development and interaction of cultures
- State-building, expansion and conflict
- Interaction between humans and the environment
- Creation, expansion and interaction of economic systems

Prerequisite Courses: None

Applies toward graduation requirements of: 1 World History credit

United States History	Credit 1	11
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: This course provides students with an overview of the history of the United States by analyzing change and continuity within historical eras. This course includes a historical overview of political, military, scientific, and social developments while students analyze multiple and complex causal factors that have shaped major events in US history. Students will engage within compelling questions to plan inquiries; compare and evaluate sources for relevance, perspective, and accuracy; use sources to gather evidence to develop and refine claims; and communicate their conclusions. Course content will include the unique perspectives of American Indians in US History.

The Historical Eras to be addressed:

- Founding Era to Reconstruction
- Manifest Destiny/Gilded Age
- Progressives and Imperialism
- World War 1/Depression/World War 2
- Early Cold War/Domestic America 1945-60
- Civil Rights/Vietnam War
- Late Cold War/Detente 1960-90
- Watergate to Reagan/Bush Sr. 1973-92
- New Millennium 1990-Current

Prerequisite Courses: None
Applies toward graduation requirements of: 1 United States History credit

Advanced Placement

United States History	Credit 1	11
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: The Advanced Placement program in United States History is designed to provide students with the analytical skills and factual knowledge necessary to deal critically with the problems and materials in United States history. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Students should learn to assess historical materials-their relevance to a given interpretive problem, their reliability, and their importance- and to weigh the evidence and interpretations presented in historical scholarship. An Advanced Placement United States History course should thus develop the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in an essay format.

This course will address the following areas of study:

- Indigenous Peoples and Societies of North America
- Colonization and World Settlement in North America
- The Revolution
- The Advent of the United States and the Constitutional Period Era
- Expansion
- The Civil War
- Reconstruction and Industrialization
- The Emergence of Modern America During the World Wars and Interwar Period
- The Rise of America as the Dominant World Power in the Later 20th Century

Prerequisite Courses: None
Applies toward graduation requirements of: 1 United States History credit

College American History 1 (Career Center)	Credit ½ 3 Credits @ MSU Billings	11
Course Name	**Semester 1** ***To be taken with College American History 2** **2nd Semester (Full Year Course)**	**Grade Level**

Course Description: Surveys American history from the establishment of the colonies to the end of the Reconstruction period after the Civil War. Includes such topics as the English political and cultural heritage, independence, creation of the Constitution, early national period, increasing democracy, economic problems, manifest destiny, slavery, sectionalism, disunion, war, and reunion

This course is the equivalent of HSTA 101 American History 1 (3 credits) at Montana State University-Billings.

Prerequisite Courses: It is recommended that students take College American History 2 2nd semester.

Applies toward graduation requirements of: 1 United States History credit

College American History 2 (Career Center)	Credit ½ 3 Credits @ MSU Billings	11
Course Name	**Semester 2**	**Grade Level**

Course Description: Surveys the political, economic, and social development of the U.S. since Reconstruction. Deals with industrialization and the agrarian reaction, Progressive Era, U.S. reaction to World War I, 1920's, Depression and the New Deal, background to involvement in World War II, Cold War Leadership, (including Korea and Vietnam), and the domestic changes since World War II.

This course is the equivalent of HSTA 102 American History 2 (3 credits) at Montana State University-Billings.

Prerequisite Courses: It is recommended that students take college American History 1 1st semester.

Applies toward graduation requirements of: 1 United States History credit

United States Literature/ United States History Block (Senior only)	**Credit 1 English**	**11**
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: The combination of American History and American Literature follows the curriculum and essential requirements currently established and approved in School District Two for 11th Grade English and United States History. This American Studies approach encourages the students to appreciate and understand links between the past and the writers who explored the American experience of writing and discussing, students examine the different genres and periods of the past. Students are required to take both the literature and history portions of the block both semesters.

TWO HOUR BLOCK

Prerequisite Courses: None

Applies toward graduation requirements of: 1 United States History credit

United States Government	**Credit ½**	**12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: The goal of education in government is informed, responsible participation in political life. The study of the United States government will provide students an opportunity to acquire knowledge of government and to practice the skills necessary to become responsible, participatory citizens.
This course will address the following areas of study:

- The U.S. Constitution
- Federalism
- Comparative Government
- Politics and Political Participation
- Political Theory
- The Election Process
- The Courts
- The Executive Branch
- The Legislative Branch
- The Structure of State, Tribal, and Local governments
- Civil Liberties and Rights

Prerequisite Courses: None

Applies toward graduation requirements of: 1/2 United States Government credit & 1/2 Social Studies credit

Advanced Placement United States Government	Credit 1	12
Course Name	**Semester 1 & 2** **Full Year Course**	**Grade Level**

Course Description: Advanced Placement United States Government is an essential study for students desiring success on the A.P. U.S. Government exam. In this college level course, students will enter in an in-depth study of government through readings, writing assignments, and research projects.
This course will address the following areas of study:

- Constitutional underpinnings of the United States Government
- Political Beliefs and Behaviors
- Institutions of National Government: the Congress, the Presidency, the Bureaucracy, and the Federal Courts
- Political Parties, Interest Groups, and Mass Media
- Public Policy
- Civil Rights and Civil Liberties
- The Structure of State, Tribal, and Local Governments

Prerequisite Courses: 1 credit of American History or Advanced Placement American History

Applies toward graduation requirements of: 1/2 United States Government credit **AND** 1/2 Social Studies credit

College American Government	Credit ½ 3 Credits @ MSU Billings	12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Covers the American Political System relative to central government and institutions. Attention is given to concepts, organizations and functions with emphasis on the political, governmental and democratic processes and problems, including the role of individual and group relationships. Provides a perspective and background for further study in Political Science. Please see individual school's syllabus for additional topics. Students must meet entrance requirements and pay course fees.

City College/MSU-Billings: 3 credits in PSCI 210 Introduction to American Government will be issued to students who pass all competencies.

Prerequisite Courses: Qualifying score on the ACT or on the Accuplacer Exam.

Applies toward graduation requirement of: ½ United States Government credit

Psychology	**Credit ½**	**12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This class will help students understand and describe human thinking, learning, memory, development, personality, and behavior.

This course will address the following areas of study:

- Social and Cultural Dimensions of Behavior
- Sensation and Perception/Motivation and Emotion
- Mental and Emotional Health
- Personality/Memory/State of Consciousness
- Human Growth and Development
- Biological Bases/Research and Methods
- Psychological Disorders and Treatments

Prerequisite Courses: None

Applies toward graduation requirements of: 1/2 Social Studies credit

AP Psychology	**Credit 1**	**12**
Course Name	**Semester 1 & 2 (Year Long)**	**Grade Level**

Course Description: Advanced Placement ® Psychology is a one semester collegiate level survey which will introduce students to psychological objectives, content, and methodologies. The goal of this course is to give students a useful understanding of that content, along with evidentiary understandings of treatment, neuropsychological contributions to the field, and psychology as a science. This course will include extensive readings from an AP® recognized college level text along with an assortment of other scholarly readings, most of which are noted in the course syllabus. Students will have the opportunity to earn college credit through the Advanced Placement examination process.

This course will address the following areas of study:

- History and Approaches/Research Methods
- Sensation and Perception
- Biological Basis of Behavior/State of Consciousness
- Cognition and Memory
- Motivation/Emotion/Personality
- Developmental Psychology
- Testing and Individual Differences
- Abnormal Psychology and Treatment
- Social Psychology

Prerequisite Courses: There are no specific prerequisite courses that are required for enrollment in AP® Psychology. Nonetheless, students enrolling in this course should be prepared for challenging readings, assignments, and exams.

Applies toward graduation requirements of: 1/2 Social Studies credit or 7 Elective credits

College Intro to Psychology(Career Ctr)	Credit ½ 3 Credits @ MSU Billings	12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course is an introduction to the nature and scope of the field of psychology as a scientific and human endeavor. Major topics include: historic development of the field; biological and developmental processes; consciousness and perceptions; learning, remembering, and thinking; motivation and emotion; personality and individuality; social behavior; normal stress and coping; and abnormal psychology and treatment methods.

This course is the equivalent of PSYX 100, Introduction to Psychology, at MSU Billings.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: There are no specific prerequisite courses that are required for enrollment. Nonetheless, students enrolling in this course should be prepared for challenging readings, assignments, and exams.

Montana History	Credit ½	12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: The purpose of Montana History is to understand the interplay of cultures; Native American, Asian, Hispanic, and European; in the development of the unique culture in Montana.

This course will address the following areas of study:

- Pre-contact and Montana's Indigenous People
- Exploration and Fur Trade
- Cattle
- Montana in the Late 19th Century
- Homesteading
- Depression and World War II
- Post-World War II and Montana

Prerequisite Courses: None

Applies toward graduation requirements of: 1/2 Social Studies credit

20th Century Genocide (West only)	Credit ½	12
Course Name	**Semester 1**	**Grade Level**

Course Description: This class will include 20th century genocide. The Holocaust is a reminder of how a modern nation, with educated citizens, advanced technology, and a sophisticated culture can implement a program that its citizens will follow for racial hatred and mass murder. The events of the American Indians in Montana, the genocide in Turkey, Cambodia, the Balkans, Rwanda, and today in Darfur will be studied also.

Prerequisite Courses: None

Applies toward graduation requirements of: 1/2 Social Studies credit

Economics	Credit ½	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course will introduce students to the fundamentals of macro and micro economic principles, the tangible workings of our economic system, and the general functions of the financial sector.

This course will address the following areas of study:

- The Prominent Economic Systems and Comparative Analysis
- Economic Decision Making
- Aggregate Supply and Demand
- Money Multipliers and Consumption
- Business Cycles
- Currency and Trade
- Price Utility and Elasticity
- Industrial Hierarchies
- Marginal Thinking
- Financial Markets and Institutions
- The Federal Reserve System

Prerequisite Courses: None

Applies toward graduation requirements of: 1/2 Social Studies credit

***This course applies to the Financial Literacy Credit for graduation starting with Class of 2027.**

AP Macroeconomics(Career Center only)	Credit ½	12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Advanced Placement Macroeconomics is an introductory college-level course that focuses on the principles that apply to an economic system as a whole. The course will place particular emphasis on the study of national income, price determination, as well as supply and demand curve analysis. Additional subjects of study will include economic indices; financial intermediation and markets; stabilization policies; economic growth; and international trade. The U.S. Federal Reserve System and comparative economic theories will also be examined in detail. Students will utilize graphs, charts, and data to analyze, describe, and explain economic concepts. Advanced Placement Macroeconomics is a one semester course.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: There are no specific prerequisite courses that are required for enrollment in AP Macroeconomics. Nonetheless, students enrolling in this course should be prepared for challenging readings, assignments, and exams.

Applies toward graduation requirements of: ½ Social Studies credit

***This course applies to the Financial Literacy Credit for graduation.**

Sociology	Credit ½	12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This class will help
students examine human relationships and behaviors. The course will study the causes and consequences of human interaction from the group perspective.

This course will address the following areas of study:

- Sociology as a Social Science
- The Sociological Perspective and Scientific Method
- Society and the Individual
- Group Interactions
- Social Institutions
- Social Problems

Prerequisite Courses: None

Applies toward graduation requirements of: 1/2 Social Studies credit

Native American Studies	Credit ½	12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Native American Studies offers a thorough exploration of Indigenous cultures across the United States, with a specific focus on the diverse tribes of Montana, individual tribal members, and Indigenous Ways of Knowing. Since Time Immemorial to the present day, this course has adopted an inquiry-based approach, examining primary source documents in history, geography, economics, and civics. Covered topics include sovereignty, land rights, environmental justice, cultural revitalization, and Indigenous Peoples resistance movements.

This course underscores the state of Montana's commitment to education in recognizing the unique cultural heritage of rights of Indigenous peoples within its borders, specifically outlined in the state constitution under Article X, "The legislature recognizes the distinct and unique cultural heritage of the American Indians and is committed in its educational goal to the preservation of their cultural integrity."

Key areas of focus include:

- Diversity among tribes in languages, cultures, and history
- Oral History is as valid as written history
- Diversity exists between individual experiences, perspectives, and spiritual beliefs
- Reservations are land set aside by tribes for their own use, as stipulated through treaties negotiated between Sovereign Indigenous Nations and the United States Government
- The significant impact of Indigenous activism and artistic expression on shaping contemporary society

Prerequisite Courses: None
Applies towards the ½ Social Studies credits

College Native American Studies	Credit ½	12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course offers a comprehensive survey of American Indian cultures, values, and history from both the regional and national perspectives. Students explore the interaction between Indian and non-Indian cultures and develop foundational knowledge of issues such as sovereignty, cultural continuity, and contemporary challenges facing indigenous communities.

Course Objectives:

- Present key cultural, historical, and sociological perspectives of Native American peoples in the United States and the Montana region.
- Develop students' abilities to critically examine historical and current issues affecting Indigenous communities, including government-tribal relationships and cultural change.
- Enhance students' reading, writing, and analytical thinking skills through exposure to Indigenous voices, scholarship, media, and primary sources.
- Foster intercultural awareness and respectful dialogue by exploring diverse Indigenous worldviews, traditions, and contributions with a pluralistic society.

Prerequisite Courses: None
Applies toward graduation requirements of: ½ Social Studies credit

WORLD LANGUAGES

The goals of foreign language study are linguistic and cultural. The overall linguistic objectives for modern foreign languages are:

- **To comprehend the spoken and written language without translation into English**
- **To communicate with others in the language**
- **To write the language in the accepted and current form and style**
- **To listen, read, write, and speak in the target language**

The cultural objectives are:

- **To understand foreign social, political, religious, and economic life**
- **To appreciate and respect foreign traditions, customs, art, and achievements**
- **To comprehend the relationship between two cultures and, by comparison, to learn and to become aware of American values, traditions, social, and political institutions**

Language study can involve adventure and the fun of exploring the unfamiliar. Successful language students tend to have the following characteristics:

- **Ability to stay on task**
- **Ability to pay attention to language structure and reconstruct concepts**
- **Ability to analyze and transfer material**
- **Willingness to memorize, utilize, and recycle assigned vocabulary on an ongoing basis**
- **Willingness to participate orally in class activities**
- **Willingness to accept responsibility for their learning and have a growth mindset**

Students will be eligible and encouraged to participate in the Montana State Seal of Biliteracy program in Semester 2.

French 1	Credit 1	9, 10, 11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Students in French 1 will begin to communicate in the target language. Students will be learning a variety of everyday terms and the basic elements of communication. In addition to communication, students will develop an understanding of culture, will learn to connect the target language to English, and discover the influence of the language in our community. Students will be required to read, write, speak and listen in the target language on a daily basis. At the end of French 1, students should be able to sustain simple conversations utilizing the new vocabulary they have learned.
Prerequisite Courses: None
Applies toward graduation requirements of: 7 Elective credits

French 2	Credit 1	10, 11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Students in French 2 will begin building on the skills they acquired in French 1. Reading, writing, speaking and listening will continue to be emphasized but at a slightly more advanced level. Students will continue to make connections between the target language and culture with our own language and culture. Students will begin working with authentic materials in the target language. They may also learn about current events impacting the countries they are studying.
Prerequisite Courses: French 1
Applies toward graduation requirements of: 7 Elective credits

French 3	Credit 1	11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: The emphasis will shift from learning the language to learning in the language. The student will demonstrate increased proficiency in communication, understanding of culture, connections, comparisons, and community. Students may work from a variety of sources, texts, novels, newspapers, magazines, poetry, music, short stories and legends. Video will begin to be incorporated more frequently to enhance students' ability to understand a native speaker. More emphasis will be placed on advanced grammatical skills and essay writing. Students will also be encouraged to create original presentations in the target language.
Prerequisite Courses: French 2
Applies toward graduation requirements of: 7 Elective credits

Advanced Placement French Language & Culture	Credit 1	12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Advanced Placement French compares to an advanced-level college French Course. Emphasizing the use of French for active communication, essential requirements include comprehension of formal and informal spoken French, acquisition of vocabulary and sentence structure to facilitate the reading of French literature, composition of expository passages and complex expression of ideas orally. This course is a nationally approved curriculum.

Prerequisite Courses: French III and teacher recommendation
Applies toward graduation requirements of: 7 Elective credit

German 1	Credit 1	9, 10, 11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Students in German 1 will begin to communicate in the target language. Students will be learning a variety of everyday terms and the basic elements of communication. In addition to communication, students will develop an understanding of culture, will learn to connect the target language to English, and discover the influence of the language in our community. Students will be required to read, write, speak and listen in the target language on a daily basis. At the end of German 1, students should be able to sustain simple conversations utilizing the new vocabulary they have learned.

Prerequisite Courses: None
Applies toward graduation requirements of: 7 Elective credits

German 2	Credit 1	10, 11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Students in German 2 will begin building on the skills they acquired in German 1. Reading, writing, speaking and listening will continue to be emphasized but at a slightly more advanced level. Students will continue to make connections between the target language and culture with our own language and culture. Students will begin working with authentic materials in the target language. They will also learn about current events impacting the countries they are studying.

Prerequisite Courses: German 1
Applies toward graduation requirements of: 7 Elective credits

German 3	Credit 1	11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: The emphasis will shift from learning the language to learning in the language. The student will demonstrate increased proficiency in communication, understanding of culture, connections, comparisons, and community. Students will work from a variety of sources, texts, novels, newspapers, magazines, poetry, music, short stories and legends. Video will begin to be incorporated more frequently to enhance students' ability to understand a native speaker. More emphasis will be placed on advanced grammatical skills and essay writing. Students will also be encouraged to create original presentations in the target language.

Prerequisite Courses: German 2
Applies toward graduation requirements of: 7 Elective credits

Advanced Placement

German Language & Culture	Credit 1	12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Advanced Placement German compares to an advanced-level college German Course. Emphasizing the use of German for active communication, essential requirements include comprehension of formal and informal spoken German, acquisition of vocabulary and sentence structure to facilitate the reading of German literature, composition of expository passages and complex expression of ideas orally. This course is a nationally approved curriculum.
Prerequisite Courses: German III and teacher recommendation
Applies toward graduation requirements of: 7 Elective credits

Spanish 1	Credit 1	9, 10, 11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Students in Spanish 1 will begin to communicate in the target language. Students will be learning a variety of everyday terms and the basic elements of communication. In addition to communication, students will develop an understanding of culture, will learn to connect the target language to English, and discover the influence of the language in our community. Students will be required to read, write, speak and listen in the target language on a daily basis. At the end of Spanish 1, students should be able to sustain simple conversations utilizing the new vocabulary they have learned.

Prerequisite Courses: None
Applies toward graduation requirements of: 7 Elective credits

Spanish 2	Credit 1	10, 11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Students in Spanish 2 will begin building on the skills they acquired in Spanish 1. Reading, writing, speaking and listening will continue to be emphasized but at a slightly more advanced level. Students will continue to make connections between the target language and culture with our own language and culture. Students will begin working with authentic materials in the target language. They may also learn about current events impacting the countries they are studying.

Prerequisite Courses: Spanish 1
Applies toward graduation requirements of: 7 Elective credits

Spanish 3	Credit 1	11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: The emphasis will shift from learning the language to learning in the language. The student will demonstrate increased proficiency in communication, understanding of culture, connections, comparisons, and community. Students will work from a variety of sources, texts, novels, newspapers, magazines, poetry, music, short stories and/or legends. Video will begin to be incorporated more frequently to enhance students' ability to understand a native speaker. More emphasis will be placed on advanced grammatical skills and essay writing. Students will also be encouraged to create original presentations in the target language.

Prerequisite Courses: Spanish 2
Applies toward graduation requirements of: 7 Elective credits

Advanced Placement

Spanish Language & Culture	Credit 1	12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Advanced Placement Spanish compares to an advanced-level college Spanish Course. Emphasizing the use of Spanish for active communication, essential requirements include comprehension of formal and informal spoken Spanish, acquisition of vocabulary and sentence structure to facilitate the reading of Spanish literature, composition of expository passages and complex expression of ideas orally. This course is a nationally approved curriculum.

Prerequisite Courses: Spanish III and teacher recommendation
Applies toward graduation requirements of: 7 Elective credits

Montana Indigenous Languages Program (Online via MTDA)
½ Credit per Semester Course
Grades, 9, 10, 11, 12
Semester 1 or 2

The Montana Indigenous Languages Program offered through the Montana Digital Academy (MTDA) will provide all Montana Public School students an opportunity to learn the Indigenous Languages of our Montana First Nations. The course offerings through MTDA supports the fulfillment of MT 20-7-1404 Indian Language Immersion Programs, which was the result of the 2021 Montana Legislature. The course offerings and continued research can also be attributed to the federal MOA to use, practice, and develop Native American Languages.

Students can take each language offered once at one per semester. As more languages or additional levels of current languages are offered, students will have the opportunity to enroll pending the final MTDA schedule.

For more information, visit:

http://montanadigitalacademy.org/programs/indigenous-language/

Montana Indigenous Languages Program

Neyio (Cree)	**Credit ½**	**9,10, 11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course focuses on building Neyio (Cree) language skills and related cultural knowledge. Students will also learn basic greetings, introductions, and simple conversational sentences. The successful student in this course has an intrinsic interest in language and culture. They keep an open mind while learning about cultures that may not be their own. Successful language students also have the courage to record themselves pronouncing the language and receiving feedback to improve their skills.

This course is offered through the Montana Digital Academy (MTDA).

Prerequisite Courses: None

Applies toward graduation requirements of: 7 Elective credits

Montana Indigenous Languages Program

Biiluuke (Crow)	**Credit ½**	**9,10, 11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course focuses on building Bíiluuke (Crow) language skills and related cultural knowledge. Students will learn vocabulary, basic greetings, introductions, and simple conversational sentences. Successful students in this course have an intrinsic interest in language and culture. They keep an open mind while learning about cultures that may not be their own. Successful language students also have the courage to record themselves pronouncing the language and receiving feedback to improve their skills.

This course is offered through the Montana Digital Academy (MTDA).

Prerequisite Courses: None

Applies toward graduation requirements of: 7 Elective credits

Montana Indigenous Languages Program

Nakoda (Assiniboine)	**Credit ½**	**9,10, 11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course focuses on building Nakoda (Assiniboine) language skills and related cultural knowledge. Students will learn vocabulary, basic greetings, introductions, and simple conversational sentences. Successful students in this course have an intrinsic interest in language and culture. They keep an open mind while learning about cultures that may not be their own. Successful language students also have the courage to record themselves pronouncing the language and receiving feedback to improve their skills.

This course is offered through the Montana Digital Academy (MTDA).

Prerequisite Courses: None

Applies toward graduation requirements of: 7 Elective credits

Montana Indigenous Languages Program

Dakota (Sioux)	**Credit ½**	**9,10, 11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course focuses on building Dakota (Sioux) language skills and related cultural knowledge. Students will learn vocabulary, basic greetings, introductions, and simple conversational sentences. Successful students in this course have an intrinsic interest in language and culture. They keep an open mind while learning about cultures that may not be their own. Successful language students also have the courage to record themselves pronouncing the language and receiving feedback to improve their skills.

This course is offered through the Montana Digital Academy (MTDA).

Prerequisite Courses: None

Applies toward graduation requirements of: 7 Elective credits

ART EDUCATION

Art Education courses provide the student with an opportunity for creative expression and for understanding and appreciation of the world. In addition, art courses offer the students an introduction to self-evaluation and higher level problem solving skills. The basic art elements (line, shape, and color, etc.) and the basic art principles (balance, emphasis, etc.) will be the structural framework for each of the classes. These classes, if taken for two semesters, will fulfill the visual arts graduation requirement.
Students are expected to buy basic art tools for each course. In addition, those students who undertake projects requiring relatively expensive materials will be expected to pay some of the cost. A list of courses with class prerequisites and lab fees will be provided at each of the three high schools for registration purposes.

Art Course Offerings at Individual Schools

Core Curriculum offered:

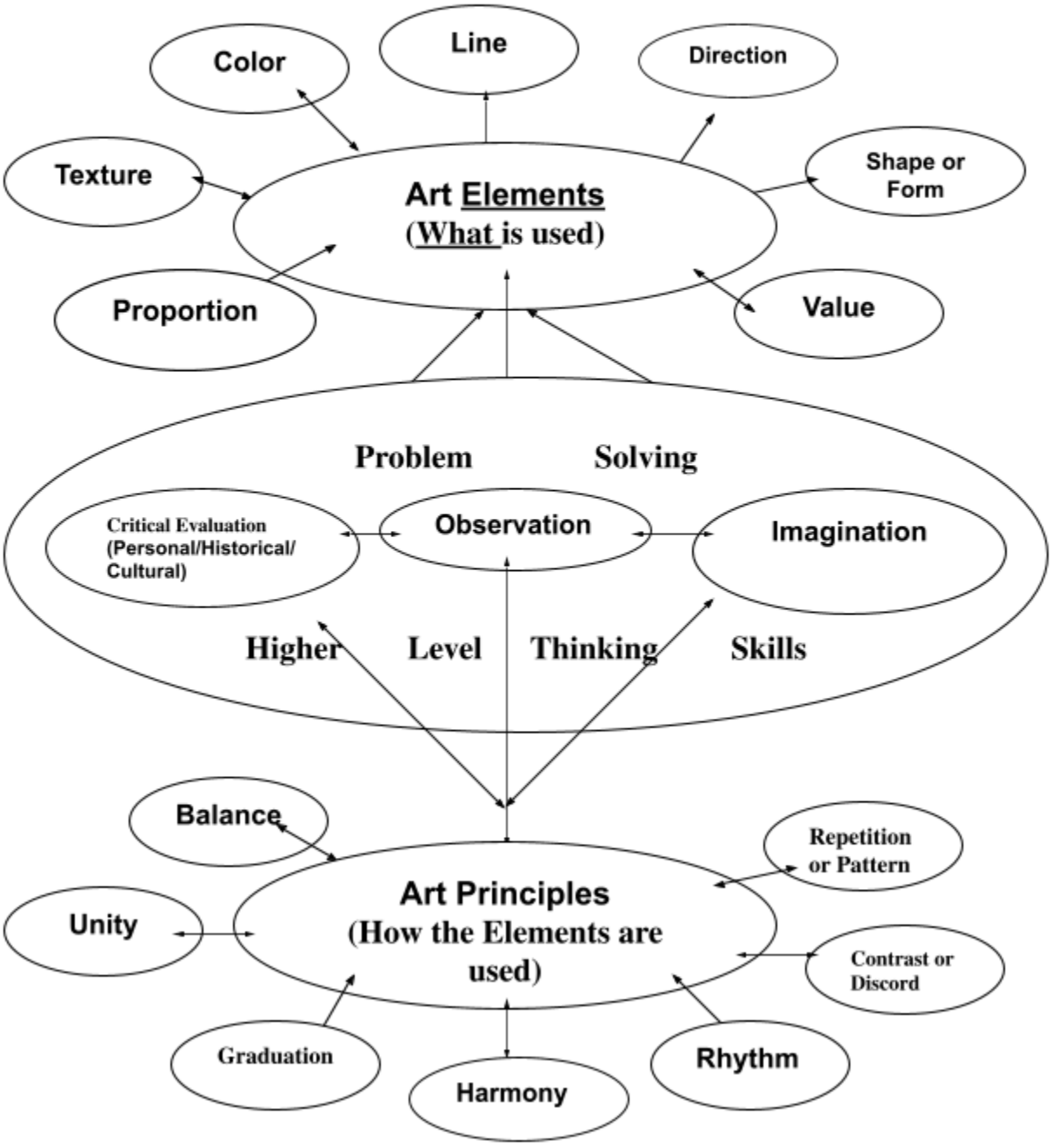
Art 1
Art 2
Unified Art
Ceramics 1
Ceramics 2
Drawing & Design
Sculpture
Advanced Art
Jewelry 1
Painting 1
Painting 2
AP Art and Design
AP Art History

Offerings unique to each school

CAREER CENTER	SENIOR	SKYVIEW	WEST
Graphics Print/ Photography	Photography		Photography
Design Advertising/Design Layout			Jewelry 2
Digital Photo			
Digital Illustration			
Animation Lab 1 & 2			
Exploring Visual Media			
AP 2D Art & Design (Photography)			

Art Department Curriculum Web

Lessons and units relate directly to some aspect of the curriculum web shown below:



The art elements are the components of art, or what an artist uses to create a work. The art principles are how an artist uses the elements to create. While the terminology applying to art elements and principles vary somewhat from artist to artist and book to book, the basic concepts are the same. For example, form is a 3-dimensional variation of shape, discord is a form of contrast, and rhythm is achieved by repeating a pattern of elements.

Art 1	**Credit ½**	**9, 10, 11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Art 1 is a basic exploratory course covering a variety of art activities. Projects are structured to accommodate students with little or no background in art, while also being open-ended to meet the enrichment needs of students with a more extensive background.

This course requires a lab fee for supplies and materials.

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Visual or Performing Arts credit

Art 2	**Credit ½**	**9, 10, 11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Art 2 emphasizes a more advanced utilization of the concepts, media, and techniques learned in Art 1. New 2-D and 3-D media and techniques are also introduced.

This course requires a lab fee for supplies and materials.

Prerequisite Courses: Art 1

Applies toward graduation requirements of: 1 Visual or Performing Arts credit

		Reg. Ed. 10, 11, 12
Unified Art	**Credit ½**	**Spec. Ed. 9, 10, 11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: The Unified Art course brings together students with and without disabilities for an art class with the goal of enhancing the intellectual and social growth of all. The class focuses on increasing the creative expression of students in a beginning art class. It also reinforces positive habits and confidence in a variety of activities. The teacher will facilitate a learning atmosphere in which typically developing peers learn to better understand their classmates' needs and learn to find creative ways to adapt instruction. The class naturally fosters new friendships among the Unified Art classmates and promotes students' leadership and social competencies. In Unified Art, individualism and inclusion naturally coexist. The environment is rich in encouragement, trust, and lasting friendships.

Regular education students can only take one time or are required to have instructor approval. Special education students may take the course multiple times.

Prerequisite Courses: None

Applies toward graduation requirements of: 7 Elective credits

Ceramics 1	Credit ½	10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Ceramics 1 presents a brief history of ceramics. Students are exposed to hand-built and wheel thrown techniques. They also study decorating, glazing, stacking, and firing of ceramics. In order to understand the complete process, emphasis will be on pottery as a functional as well as sculptural art form using basic elements and principles of design.

This course requires a lab fee for supplies and materials.

Prerequisite Courses: Art 1 (Waived at Senior High for Juniors/Seniors)
Applies toward graduation requirements of: 1 Visual or Performing Arts credit

Ceramics 2	Credit ½	10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Ceramics 2 is a continuation of Ceramics 1. Students will work with hand building and wheel-throwing techniques. Students will actively participate in kiln loading and firing.

This course requires a lab fee for supplies and materials.

Prerequisite Courses: Ceramics 1
Applies toward graduation requirements of: 7 Elective credits

Jewelry 1	Credit ½	10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Jewelry 1 is an exploration of the fabrication of jewelry through the use of traditional and contemporary materials, tools, and equipment involved in the creation of jewelry. This is accomplished through completing a series of projects that provide a survey of basic jewelry processes, design, and history.

This course requires a lab fee for supplies and materials.

Prerequisite Courses: Art 1 and Art 2 required at Senior & Skyview, Art 1 required at West
Applies toward graduation requirements of: 7 Elective credits

Jewelry 2 – West only	Credit ½	10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Second semester (advanced) students will be expected to have a working knowledge of the skills and techniques taught at the beginning (Jewelry 1) level. They will be exposed to more advanced metals techniques and design, requiring a higher degree of physical and mental abilities. They will be expected to act as positive role models and to produce projects beyond the capabilities of beginning students.

This course requires a lab fee for supplies and materials.

Prerequisite Courses: Jewelry 1
Applies toward graduation requirements of: 7 Elective credits

Drawing and Design	Credit ½	10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course develops advanced techniques in a variety of drawing media. Projects involve problem solving using the elements and principles of design as they relate to nature, real life and the imagination.

This course requires a lab fee for supplies and materials.

Prerequisite Courses: Art 1 and Art 2

Applies toward graduation requirements of: 7 Elective credits

Sculpture (3-D Design) Senior & Skyview only	Credit ½	10, 11, 12
Course Name	**Semester 1**	**Grade Level**

Course Description: Sculpture focuses on the development and production of the 3-dimensional art form. The student will study and explore the history of sculptural art and design strategy using traditional and nontraditional materials.

This course requires a lab fee for supplies and materials.

Prerequisite Courses: Art 1 & 2, or Art 1 and Ceramics

Applies toward graduation requirements of: 7 Elective credits

Painting 1	Credit ½	10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course deals primarily with techniques in oils and/or acrylics. Projects include themes related to realism, abstraction, and working with one's imagination.

This course requires a lab fee for supplies and materials.

Prerequisite Courses: Drawing and Design

Applies toward graduation requirements of: 7 Elective credits

Painting 2	Credit ½	10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course will expand the beginning painter's understanding of the basic concepts, techniques, and practice of the painting mediums of acrylic, watercolor and oil, students will explore both traditional and non-traditional painting themes and styles through specific projects. The history of painting will be emphasized through critical analysis of paintings, past and present.

This course requires a lab fee for supplies and materials.

Prerequisite Courses: Painting 1

Applies toward graduation requirements of: 7 Elective credits

Photography (Senior and West)	Credit ½	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: The student will study cameras, film, developing and printing film, lighting, composition, special effects, developing and printing.

This course requires a lab fee for supplies and materials.

Prerequisite Courses: Teacher recommendation and administrator's approval.

Applies toward graduation requirements of: 7 Elective credits

Advanced Art	Credit 1 or ½	12
Course Name	**Semester 1 and/or 2**	**Grade Level**

Course Description: This course is designed for the serious 12th grade art student. The emphasis will be on the development of a portfolio which could be used for college acceptance, college scholarships, and job applications. The student will have the choice of working in one or more media such as painting, drawing, ceramics, sculpture etc. and must be able to work independently. This course requires a lab fee for supplies and materials.

This course requires specific supplies and materials.

- **Advanced Art - Ceramic**
- **Advanced Art - Jewelry**
- **Advanced Art - Photography (Senior only)**

Prerequisite Courses: Four semesters of Art (including Drawing & Design), or instructor approval.

Applies toward graduation requirements of: 7 Elective credits

AP Art & Design	Credit 1	11, 12
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: The AP Art and Design program consists of three different 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 of the AP Portfolio Exams. Students create a portfolio of work to demonstrate inquiry through art and design and development of materials, processes, and ideas over the course of a year. Portfolios include works of art and design, process documentation, and written information about the work presented. In May, students submit 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. Students may choose to submit any or all of the AP Portfolio Exams.

Prerequisite Courses: Prior coursework in Art 1 & 2 and upper-level art electives are highly recommended. Interested students should seek instructor recommendations and/or portfolio evaluation prior to enrollment.

Applies towards graduation requirements of: 7 Elective credits

AP Art History	Credit 1	11, 12
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: The AP Art History course welcomes students into the global art world to engage with its forms and content as they research, discuss, read, and write about art, artists, art making, and responses to and interpretations of art. By investigating specific course content of 250 works of art characterized by diverse artistic traditions from prehistory to the present, the students develop in-depth, holistic understanding of the history of art from a global perspective. Students learn and apply skills of visual, contextual, and comparative analysis to engage with a variety of art forms, developing understanding of individual works, and interconnections across history.

The AP Art History Exam assesses student understanding of the skills and learning objectives outlined in the course framework. The exam is made up of multiple choice questions and six free response questions that are answered through both long essay and short essay formats.

Prerequisite Courses: Prior coursework in Art 1 and 2 and upper-level art electives are highly recommended. Interested students should seek instructor recommendations and evaluation prior to enrollment.

Applies towards graduation requirements of: 7 Elective credits

Note: This course does not count as a social studies elective.

AP 2-D Art and Design (Photography)
(Career Center only) | **Credit 1** | **11, 12**

Course Name | **Semester 1 or 2** | **Grade Level**

Course Description:
AP 2-D Art and Design in Photography. This course introduces and develops skills that will be used in developing a 2D Art portfolio. It will also provide students with an introduction to visual concepts, basic image capture, and camera functions using digital cameras and studio lighting. Students will learn to shoot, develop, crop and mount their photographs as well as specific professional camera and editing techniques. Students will also have the opportunity to begin exploring the cutting edge field of digital photography, using the latest Adobe software available in the industry. This course consists of lecture, textbook assignments as well as darkroom and studio projects. Field trips to local businesses and location shots enhance the hands-on learning experience.

Essential Requirements:
Students will demonstrate and document the following:

- Pinhole camera construction and usage
- Basic understanding and use of software basics for photographic imaging and digital printing
- Dry mounting and presentation techniques
- Basic camera functions in DSLR
- Students will develop a 2D art portfolio to submit for the AP Portfolio Exams

TWO HOUR BLOCK

Preferred: Art 1 or an Art Portfolio

Applies toward graduation requirements of: 1 Visual/Performing Arts credit

Graphics

Print Photo (Photography)- Career Center only	**Credit 1**	**11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course introduces and explores the Graphic Art of Photography. It will also provide students with an introduction to visual concepts, basic image capture, and camera functions using digital cameras. Students will learn to shoot, develop, crop, and mount their photographs as well as specific professional camera and editing techniques. Students will also have the opportunity to begin exploring the cutting-edge field of digital photography, using the latest Adobe software available in the industry. This course consists of lecture, textbook assignments as well as darkroom and studio projects. Field trips to local businesses and location shots enhance the hands-on learning experience.

Essential Requirements:
Students will demonstrate the following:

- Pinhole camera construction and usage
- Basic understanding and use of software basics for photographic imaging and digital printing
- Dry mounting and presentation techniques
- Basic camera functions in DSLR

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

TWO HOUR BLOCK

Prerequisites: Preferred Art 1 or an Art Portfolio

Applies toward graduation requirements of: 1 Career Technical Education credit or 1 Visual/Performing Arts credit

Design Advertising
Design Layout (Career Center only) **Credit 1** **11, 12**

Course Name **Semester 1 or 2** **Grade Level**

Course Description: This challenging, hands-on course explores the art-related field of Graphic Design, and includes illustration, advertising design & layout; computer assisted design, and design theory. During the semester, students are exposed both to traditional and cutting-edge techniques and procedures, and have the opportunity to learn and create in a productive, supportive environment. Additionally, Design students will hear from a variety of professionals working in all aspects of the industry, and will spend time exploring the wide array of graphics related careers available today. Students successfully completing class will be able to step into and perform capably in a number of entry-level jobs in the graphic design industry.

Essential Requirements:

Students successfully completing this class will:

- Demonstrate a solid understanding of both the theory and application of the principles and elements of design.
- Demonstrate basic knowledge of typography and composition.
- Demonstrate basic art techniques.
- Demonstrate basic knowledge regarding the history of Graphic Design, including knowledge of a variety of well-known designers and artists.
- Demonstrate introductory knowledge of Adobe Illustrator, the industry's leading design software.

In the event of over **enrollment, first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

TWO HOUR BLOCK

Prerequisites: 1 Credit of Art (2 art classes) preferred

Applies toward graduation requirements of: 1 Career Technical Education credit or 1 Visual/Performing Arts credit

Digital Photo (Career Center only)	Credit ½	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course encourages students to further develop the graphic communication and design skills learned in previous classes, and involves practical lessons dealing with image manipulation. Students will enhance their skills in photography, composition, layout & design, and through the use of Adobe Software's industry standard Creative Suite. In this class, there is a major emphasis on not only learning how to use Adobe Photoshop, but also on how to apply that knowledge in building a professional quality portfolio. Occasionally, community design/graphics projects are brought in and completed in-house by the class members.

Students successfully completing this class will be able to step into and perform capably in a number of above entry-level jobs in the Graphic Arts industry.

Essential Requirements:

Students successfully completing this class will:

- Demonstrate knowledge and application of all aspects of Adobe Photoshop/Lightroom through class lessons and self-directed work.
- Demonstrate Photoshop skills through a variety of relevant assignments, including business card and cd cover design, photo retouching, and photo manipulation.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

➢ **It is recommended students who successfully complete this class continue in Design and Layout.**

ONE HOUR CLASS

Prerequisites: Recommended first-year Graphics or several art classes

Applies toward graduation requirements of: 1 Career Technical Education credit or 1 Visual/Performing Arts credit

Digital Illustration (Career Center only)	Credit ½	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course encourages students to further develop the graphic communication and design skills learned in previous classes. Students will enhance their skills in composition, layout and design through the use of Adobe Software's industry standard Creative Suite. In this class, there is major emphasis on not only learning *how* to use Adobe Illustrator, but also how to apply that knowledge in building a professional quality portfolio. Occasionally, community design/graphics projects are brought in and completed in-house by class members. Students successfully completing class will be able to step into and perform capably in a number of entry-level jobs in the graphic design industry.

Essential Requirements:

Students successfully completing this class will:

- Demonstrate a solid understanding of both the theory and application of the principles and elements of design.
- Demonstrate basic knowledge of typography and composition.
- Demonstrate basic art techniques.
- Demonstrate basic knowledge regarding the history of Digital Design, including knowledge of a variety of well-known designers and artists.
- Demonstrate knowledge of Adobe Illustrator, the industry's leading design software, including: tool usage, and intermediate skill.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented**.**

- ➢ **It is recommended that students who successfully complete this class and have also completed Graphics/Print Photo continue with Digital Photo.**

ONE HOUR CLASS

Prerequisites: Students must earn a "C" or better in Design Advertising/Design Layout

Applies toward graduation requirements of: 1 Career Technical Education credit or 1 Visual/Performing Arts credit

Animation Lab 1 (Career Center only)	**Credit ½**	**10, 11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This exciting course introduces students to the world of animation, moving from traditional methods and terminology (including anatomy, basic perspective and flipbooks) to cutting-edge techniques using Abode Animate software to create and animate 2-dimensional computer-based graphics. There is a strong emphasis placed on drawing, both character and environment.

Other Key Elements:

- Flash animation designed and developed specifically for the web
- Use of emerging technology
- Creation of storyboards and outlines
- Creative thinking with technology

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: 10th grade students must have successful completion of Exploring Visual Media. No prerequisite courses required for 11th and 12th grade students. Art 1 and basic drawing skills are helpful but not required.

Applies toward graduation requirements of: 1 Career Technical Education credit or 1 Visual/Performing Arts credit

Animation Lab II (Career Center only)	**Credit ½**	**11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course builds on previously learned animation techniques and allows students to take their creativity to the next level in multiple animations. Additionally, students will continue to work on their ability to draw convincing poses, expressions, character designs, thumbnails, and storyboards.

Other Key Elements:

- Advanced techniques in Flash, After Effects, and 3D programs
- Use of emerging technology

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: Requires a grade of “C” or higher in Animation Lab 1

Applies toward graduation requirements of: 1 Career Technical Education credit or 1 Visual/Performing Arts credit

Exploring Visual Media (Career Center only)	Credit ½	10,11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Exploring Visual Media opens the pathway to an exciting world of graphics-related technology and career options.

Interested students will engage in an intensive, semester long tour through the fields of visually-related media.

Additionally, students taking **Exploring Visual Media** will have the opportunity to learn about visually related career options in a variety of ways, including field trips, guest speakers, video presentations, and traditional, pen/paper-based research.

Students leaving the class will be well-equipped to continue their exploration in any of the Career Center's other graphics-based offerings.

Essential Requirements:
Students will explore the following graphics-linked disciplines:

- Graphic Design: Students will learn the basics of graphic design, including composition, color theory, typography and the principles of design. Students will create a variety of work based upon the information they learn.
- Photography: Students will learn the principles of photography and will learn how to build their very own working pinhole cameras. They will develop their own film and print their own pictures before moving on to cutting-edge, digitally based photography.
- Animation: Students will explore the history of animation, as well as the principles behind it. They will create their own paper-based animations and be briefly introduced to the Adobe's "Animate" software.
- Web Design: During this brief introduction to the world of web design, students will learn about the principles necessary to designing an effective webpage, and will take a look at "coding" the most effective way of creating web-based content.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit or 1 Visual/Performing Art credit

THEATRE

Theatre 1	Credit ½	9, 10, 11, 12
Course Name	**Semester 1 and/or 2**	**Grade Level**

Course Description: Theatre 1 is designed to introduce, review, and improve acting techniques. This course encompasses not only acting but theatre history, play writing, stage makeup, costuming, and business management. Several scenes as well as one-act plays are rehearsed and performed.

Prerequisite Courses: None

Applies toward graduation requirements of: 7 Elective credits

Theatre 2	Credit ½	9, 10, 11, 12
Course Name	**Semester 1 and/or 2**	**Grade Level**

Course Description: Theatre 2 is designed for the returning theatre student. In this course the student will learn body and voice communication; mental discipline and creativity; dramatic tradition (such as the study of dramatic form, playwrights and major plays); the performance aspects of theatre including personal growth and awareness of aesthetics; and the exploration of career and leisure possibilities. Theatre production involves several disciplines such as acting, play producing, (business management), and technical theatre (staging, lighting, designing, costuming, etc.). The course includes discrimination of artistic quality, and knowledge of other cultures and dramatic heritage.

Prerequisite Courses: Theatre 1 or instructor approval

Applies toward graduation requirements of: 7 Elective credits

Technical Theatre (Skyview Only)	Credit ½	10, 11, 12
Course Name	**Semester 1 and/or 2**	**Grade Level**

Course Description: This course focuses on technical theatre to develop an overall understanding and appreciation of theatre. Emphasis will be placed on costume, scenic, and lighting design in addition to the business side of theatre, studying concepts and skills including color theory, construction, painting, sewing Basics, stage management, marketing, and hanging lights. Members of the class will assist with the technical aspects of Skyview theatre productions presented during the semester during the class in a “work lab” based environment. Students may take this course more than one semester.

Prerequisite Courses: Theatre 1 & 2
Completion of Semester 1 to register for Semester 2

Applies toward graduation requirements of : 7 Elective Credits

MUSIC

Simply stated, music students as a whole enjoy greater college success. One recent study of 7,500 university students revealed that music majors scored the highest reading scores among all majors including English, biology, chemistry, and math. And according to an article in the *Phi Delta Kappan Journal*, 1994, Physician and biologist Lewis Thomas studied the undergraduate majors of medical school applicants, indicating that music majors were most successful in being admitted to medical school. He found that 66% of music majors who applied to medical school were admitted, the highest percentage of any group. By comparison, 44% of biochemistry majors were admitted.

Music is one of the arts which so sharpened our sense of participation in the world that it gave a much greater meaning to life. Anthony Storr says, "Although music is not a belief system, I think that its importance and its appeal also depend upon its being a way of ordering human experience. Music exalts life, enhances life, and gives it meaning. Great music outlives the individual who created it. It is both personal and beyond the personal. For those who love it, it remains as a fixed point of reference in an unpredictable world. Music is a source of reconciliation, exhilaration, and hope which never fails." -----from the University of North Carolina, Wilmington

Music benefits the student because it cultivates the whole person, gradually building many kinds of literacy while developing intuition, reasoning, imagination, and dexterity into unique forms of expression and communication. This process requires not merely an active mind but a trained one. It introduces students to a variety of ways of perceiving and thinking.

The High School Music Department provides opportunities for all students to participate because the variety of classes offered is structured to accommodate individual interests and ability levels. Although auditions are required for participation in the more advanced ensembles, each discipline makes allowances for open enrollment in other classes. Participation in the "curricular" music classes also affords the student with opportunity to take advantage of a variety of extra-curricular musical activities.

Music courses, if taken for two semesters, will fulfill the visual and performing arts graduation requirement.

Band	Credit 1	9
Course Name	**Semester 1 and 2**	**Grade Level**

Course Description: This class is intended for freshman students who have successfully participated in 7th and 8th grade band class, playing woodwind and brass instruments. Percussion students should enroll in PERCUSSION ENSEMBLE. Emphasis is placed on the fundamentals of music and instrumental technique. A wide variety of musical literature will be explored. A part of the course content includes required public performances of prepared literature.

Prerequisite Courses: At least 2 years (or equivalent) of successful band experience AND/OR Instructor approval.
Applies toward graduation requirements of: 1 Visual or Performing Arts credit

Concert Band	Credit 1	10, 11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: This is a mid-level ensemble. The students receive more advanced instruction in music fundamentals, instrumental technique and the interpretation of various styles of band literature. A part of the course content includes required public performances.

Prerequisite Courses: At least 2 years (or equivalent) of successful band experience AND/OR Instructor approval.
Applies toward graduation requirements of: 1 Visual or Performing Arts credit

Symphonic Band	Credit 1	9, 10, 11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: This group is a balanced ensemble designed to facilitate student achievement to the highest possible standards of excellence. The course explores band literature of many eras. Various musical idioms are studied through analysis and rehearsal. A part of the course content includes required public performances.

Prerequisite Courses: By AUDITION ONLY---Auditions to be held in the spring for the following school year.
Applies toward graduation requirements of: 1 Visual or Performing Arts credit

Percussion Ensemble	Credit ½	9, 10, 11, 12
Course Name	**Semester 1**	**Grade Level**

Course Description: All percussionists (grades 9-12) are placed in percussion ensemble for the first semester of the school year. The course will focus on percussion techniques on both melodic and non-melodic instruments in the band and orchestra ensembles. The class will perform as a group at concerts during the fall semester. At the end of the first semester, students will be assigned to a band class for the second semester through an audition process. **Equipment needed for this class** includes snare sticks, bell mallets, yarn mallets, and timpani mallets. Students should have a basic understanding of snare drum rudiments and be able to demonstrate basic music reading skills.

Prerequisite Courses: At least 2 years (or equivalent) of successful band experience AND/OR Instructor approval.
Applies toward graduation requirements of: 1 Visual or Performing Arts credit

Music Theory – Skyview & West	Credit ½	10, 11, 12
Course Name	**Semester 2**	**Grade Level**

Course Description: This course is recommended for students planning on taking Music Theory in college. Music Theory is a second semester course open to all students (grades 10-12).
The fundamentals of musicianship are examined through visual and aural analysis. Principles of music notation, harmony and composition are explored, as well as harmonic and melodic dictation. Previous experience in music classes is preferred, but not required. ***Only offered on odd-numbered years at West.**

Prerequisite: None
Applies toward graduation requirements of: 1 Visual or Performing Arts credit

String Orchestra - Senior/West	Credit 1	9, 10, 11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: This class is an entry-level orchestra course. The course is oriented toward the less experienced player. Emphasis is placed on the fundamentals of music and instrumental technique. This class would be an excellent opportunity for an established musician to switch to a different instrument, or to pick up an instrument that has not been played recently. A wide variety of musical literature will be explored. A part of the course content includes public performances.

Prerequisite Courses: At least 2 years (or equivalent) of successful orchestra experience AND/OR Instructor approval.
Applies toward graduation requirements of: 1 Visual or Performing Arts credit

Chamber Orchestra	Credit 1	9, 10, 11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: This class is an intermediate-level orchestra course. The course is oriented toward the average experienced player. Emphasis is placed on the fundamentals of music and instrumental technique. A wide variety of musical literature will be explored. A part of the course content includes public performances.

Prerequisite Courses: Audition and Instructor Approval
Applies toward graduation requirements of: 1 Visual or Performing Arts credit

Philharmonic Orchestra	Credit 1	9, 10, 11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: This group is a balanced ensemble designed to facilitate student achievement to the highest possible standards of excellence. The course explores orchestra literature of many eras. Various musical idioms are studied through analysis and rehearsal. Full orchestra (including wind players) necessitates some rehearsals outside of the regularly scheduled class times. A part of the course content includes required public performances.

Prerequisite Courses: Audition and instructor approval
Applies toward graduation requirements of: 1 Visual or Performing Arts credit

Cantus (Tenor/Bass)	**Credit 1**	**9, 10, 11, 12**
Chanterelles (Alto/Soprano)	**Credit 1**	**9, 10, 11, 12**
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: This is an ensemble for beginning or developing singers. Emphasis is placed on the fundamentals of music and vocal technique. A wide variety of musical literature will be explored. A part of the course content includes required public performances.

Prerequisite Courses: None
Applies toward graduation requirements of: 1 Visual or Performing Arts credit

Concert Choir (Mixed Choir)	**Credit 1**	**9, 10, 11, 12**
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: This group is a balanced choir of intermediate to advanced singers. The students receive instruction in music fundamentals, vocal technique and the interpretation of various styles of choral literature. A part of the course content includes required public performances.

Prerequisite Courses: BY AUDITION ONLY---Auditions to be held in the spring for the following school year.
Applies toward graduation requirements of: 1 Visual or Performing Arts credit

Chamber Choir (Treble Choir)	**Credit 1**	**9, 10, 11, 12**
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: This group is a balanced choir of intermediate to advanced female singers. The group explores great literature for women's voices of all styles and periods in history. A part of the course content includes required public performances.

Prerequisite Courses: BY AUDITION ONLY---Auditions to be held in the spring for the following school year.
Applies toward graduation requirements of: 1 Visual or Performing Arts credit

Varsity Choir - Senior	**Credit 1**	**9, 10, 11, 12**
Chorale - Skyview	**Credit 1**	**9,10, 11, 12**
Meistersingers Choir - West	**Credit 1**	**9, 10, 11, 12**
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: This group is a balanced (SATB) ensemble designed to facilitate student achievement to the highest possible standards of excellence. The course explores choral literature of many eras. Various musical idioms are studied through analysis and rehearsal. A part of the course content includes required public performances.

Prerequisite Courses: BY AUDITION ONLY---Auditions to be held in the spring for the following school year.
Applies toward graduation requirements of: 1 Visual or Performing Arts credit

Music Improvisation – Senior & West	Credit ½	10, 11, 12
Course Name	**Semester 2**	**Grade Level**

Course Description: Music Improvisation is a second semester course. This class will explore many musical styles, with emphasis on musical improvisation. Class work will include fundamentals of improvisation, music theory, ear training, and practice methods. Creativity and experimentation within your musical genre will be encouraged. Final projects may include public performances, solo transcriptions, and student compositions. **This class is offered every year at Senior; it is only offered on even-numbered years at West.**

Prerequisite Courses: Students are enrolled in band, choir or orchestra, or by Instructor approval. Students should know all 12 major scales.

Students should be proficient readers of music.

Applies toward graduation requirements of: 1/2 Visual or Performing Arts credit

BUSINESS EDUCATION

Looking to prepare for your future, no matter where it takes you? Whether you dream of starting your own business, joining a small family-run company, or working for a global corporation, having the right skills is key to success. Business education classes give you hands-on, real-world knowledge about how businesses operate—skills you'll use in the workplace and in college.

Dive into exciting career paths like **finance, accounting, and marketing,** where you can manage money, analyze trends, and create campaigns that change the game. Picture yourself crunching numbers for major brands, building investment portfolios, or designing cutting-edge ads that go viral. These fields are dynamic, in-demand, and packed with opportunities to earn high salaries and make an impact.

Take your learning to the next level by joining **Business Professionals of America (BPA)!** Compete in exciting events, build leadership abilities, and unlock opportunities that will set you apart. Plus, the awards and experiences you earn in BPA make impressive additions to college applications and resumes.

Get the skills you need to land your dream job and turn your passions into a career. Enroll in business courses today and step into a future full of possibilities!

Computer Applications	**Credit ½**	**9, 10, 11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: “I’m so glad I took this class!” and “Now I can ace an MLA report for English and create a professional spreadsheet for science.” These are just a couple of things students say after taking **Computer Applications**—a must-have class that equips you with skills you’ll use every day in school, college, and beyond.

In this hands-on course, you'll learn:

- **Excel:** Create spreadsheets and charts like a pro.
- **Publisher**: Design eye-catching flyers, brochures, and more.
- **Word:** Master document formatting and word processing for flawless assignments.

These aren’t just skills for class–they’re skills for life. Whether you’re organizing group projects, building your college resume, or preparing for the business world, this course sets you up for success.

Don’t wait—take **Computer Applications** now and discover how easy and rewarding it is to be tech-savvy!

Prerequisite Courses: none

Applies toward Graduation Requirements of: 1 Career Technical Education credit

Advanced Computer Applications-Skyview only	**Credit ½**	**12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Do you want to be even more prepared for college and the workforce? Learn the tricks and tools in the Microsoft Office Suite. Advanced Computer Applications emphasizes further competency in word processing, spreadsheet, and presentation activities using Word, Excel, and PowerPoint. Access database and web design activities are also introduced in this class. Learn how to automatically generate bibliographies in an MLA report, design flyers, manage and query a database and create amazing spreadsheets and charts. By using the complete Microsoft Office integrated software package students have the opportunity for more project-based applications. Course work is relevant to real life as students enter the workforce and/or continue education beyond high school.

Prerequisite Courses: Computer Applications

Applies toward Graduation Requirements of: 1 Career Technical Education credit

Personal Finance	Credit ½	9, 10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This **Personal Finance** course equips students with the knowledge and skills to make informed financial decisions for lifelong financial well-being. Students will learn to create and manage budgets, save effectively, and navigate banking tools and services. The course covers responsible credit use, understanding credit scores, and strategies to avoid debt. Students will explore investing basics, including stocks, bonds, and retirement planning, as well as the importance of starting early. They will gain an understanding of taxes, insurance, and strategies for minimizing financial risks. The course also focuses on planning for higher education costs, including financial aid, scholarships, and student loans. Career planning and income growth are emphasized, along with smart spending and consumer decision-making. By the end, students will develop the confidence and skills to manage their money responsibly and achieve their financial goals.

Prerequisite Courses: None. Computer Applications recommended.

Applies toward Graduation Requirements of: 1 Career Technical Education credit and fulfills the Financial Literacy Graduation Requirement.

Accounting 1	Credit ½	10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Do you dream of owning your own business—like a salon, dental practice, art studio, construction company, or automotive shop? Want to major in business in college and land your dream job? Imagine maximizing profits for a professional sports team, running a Fortune 500 company, or even managing finances for blockbuster movies. Sound exciting? How about tracking down financial criminals for the FBI or solving cases as a forensic accountant?

This course is your gateway to understanding the world of business and finance. Forget the old stereotype that CPAs just crunch numbers—today's Certified Public Accountants do it all! From shaping strategies for global brands to uncovering fraud, CPAs are in demand in every industry, and the opportunities are endless.

Whether you're interested in entrepreneurship, accounting, or leadership, this class will help you take the first step toward an exciting future. Join now and discover how business skills can open doors to amazing careers!

Prerequisite Courses: None

Applies toward Graduation Requirements of: 1 Career Technical Education credit and fulfills the Financial Literacy Graduation Requirement.

Accounting 2	Credit ½	10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Ready to take the next step in your accounting journey? **Accounting 2** bridges the gap between basic accounting principles and advanced financial concepts, giving you a clearer picture of how businesses thrive.

In this course, you'll:

- Build on your foundation from Accounting 1 and dive deeper into topics like adjusting entries, financial statements, and inventory management.
- Explore how accounting connects to real-world industries, from sports and entertainment to tech and small businesses.
- Complete a **real-world simulation** that combines everything you've learned in Accounting 1 and 2. You'll track transactions, balance the books, and see firsthand how financial decisions shape success.

This is more than just another accounting class—it's your chance to see the big picture, understand how every piece fits together, and gain skills that will set you apart in college and your career.

Take **Accounting 2** and step into the world of business and confidence, clarity, and the knowledge to make a real impact. Enroll today and see where accounting can take you!

Prerequisite Courses: Accounting 1

Applies toward Graduation Requirements of: 1 Career Technical Education credit

Accounting 3 - Senior & Skyview only	Credit ½	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Are you ready to take your accounting skills to new heights? This course builds on the foundations of accounting, giving you the tools to tackle real-world financial challenges and explore high-level career opportunities.

In Accounting 3, you'll:

- Dive deeper into **financial analysis** and **cost accounting**, learning how businesses make strategic decisions.
- Explore **forensic accounting**, where you'll uncover financial fraud and solve cases—skills used by the FBI and other investigative agencies.
- Learn about **business ownership** and what it takes to keep a company profitable and successful.
- Explore online accounting software.

This course is perfect for students who want to:

- Own a business and handle the finances like a pro.
- Major in business, finance, or accounting in college.
- Pursue exciting careers like forensic accountant, financial analyst, or corporate executive.

Prerequisite Course: Accounting 2

Applies toward Graduation Requirements of: 1 Career Technical Education credit

Accounting 4 - Senior & Skyview only	**Credit ½**	**11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: You've come this far—now it's time to master the skills that put you in charge. In Accounting 4, the final course in the accounting sequence, you'll dive into the advanced concepts that make businesses run at their best.

Here's what you'll conquer in this course:

- Managerial Accounting: Learn how to make strategic decisions using financial data to maximize profits and improve operations.
- Departmental Accounting: Understand how to track and manage finances for different business departments.
- Financial Analysis: Develop the ability to evaluate financial statements and make recommendations that drive success for companies of all sizes.

This class goes beyond the numbers, giving you the skills to think like a leader, solve complex problems, and see how accounting shapes every aspect of a business. Take the final step toward becoming a financial expert. Enroll in **Accounting 4** and finish strong!

Prerequisite Courses: Accounting 3

Applies toward Graduation Requirements of: 1 Career Technical Education credit

Marketing	**Credit ½**	**10, 11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Learn how marketing is the force behind the brands, ads, and products you see every day! From the latest viral campaigns on your favorite social media platforms, marketing is everywhere. It's in the commercials on TV, the designs on your favorite snacks, and even the streaming commercials that catch your attention.

But there's so much more to marketing than what meets the eye. In this class, you'll uncover the secrets behind how businesses:

- Create unforgettable brands and products.
- Design ads that grab attention and influence decisions.
- Reach the right audience at the right time.

This course gives you a deeper dive into the strategies, creativity, and business smarts behind the marketing magic you see every day. Whether you're dreaming of running your own brand, working for a major company, or just want to understand how marketing shapes the world, this class is your next big step.

Prerequisite Courses: Computer Applications is recommended. (Advanced Computer Applications, Desktop Publishing, or Accounting 1 is ***strongly*** recommended).

Applies toward Graduation Requirements of: 1 Career Technical Education credit

Managerial Science	Credit ½	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Managers assist teachers and students in the business labs with presentations, organizing, and peer tutoring. Entry-level management, supervision, and performance reviews are also emphasized. Interested students must have taken other business courses, apply to the instructors, and be accepted for this position.

Prerequisite Courses: Teacher approval

Applies toward Graduation Requirements of: 1 Career Technical Education credit

Advanced/College Computer Applications	Credit ½	9, 10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Advanced/College Computer Applications emphasizes further competency and industry standards using Microsoft Office. Learn how to create useful spreadsheet formulas and charts, automatically generate bibliographies in an MLA report, manage and query a database, and design publications. Project-based course work is relevant to real life as students enter the workforce and/or continue education beyond high school.

Prerequisite Courses: Computer Applications with an A or B grade

Applies toward Graduation Requirements of: 1 Career Technical Education credit

Dual Credit through ***Montana State University Billings***
CAPP 120 Introduction to Computers and Applications (3 credits)

Business in The 406	Credit ½	10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Unleash your entrepreneurial spirit in *Business in the 406!* This fun, project-based course empowers high school students to dream big and develop the skills to run their own enterprise. Through hands-on activities, you'll explore what it takes to be a successful business owner.

Learn the basics of entrepreneurship, from choosing a business structure to understanding the legal and financial aspects of running a company. You'll dive into topics like management, human resources, and funding while creating your own business plan to analyze risks and opportunities. This course is designed to inspire confidence, celebrate creativity, and help turn today's learners into tomorrow's leaders. Are you ready to start your journey?

Prerequisite Courses: Computer Applications recommended

Applies toward Graduation Requirements of: 1 Career Technical Education credit

Business Law-West and Senior only	Credit ½	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Interested in the legal environment and how it relates to business? Business Law will study true situations that show you how business and personal law impacts not only business but your life as well. This introductory learning course will help you achieve an understanding of legal principles that you will use throughout your life and how business law impacts your life on a daily basis. The projects for this class will focus on extended coverage of how to analyze legal situations, how to read case citations, how to analyze ethical situations, and legal advice. Additional focus will be on the ever emerging global economy with regards to business law and the impact it has on the 21st Century. This is a fast paced course which will challenge students by combining business law and ethics.

Prerequisite Courses: Computer Applications recommended

Applies toward Graduation Requirements of: 1 Career Technical Education credit

AP Business with Personal Finance (Senior, Skyview, and West)	Credit 1	10, 11, 12
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: This new career course introduces students to the knowledge and skills they'll need to grow their careers, manage money, and get a head start toward the most popular college major in the U.S. Students explore the business disciplines of entrepreneurship, marketing, finance, accounting, and management through real-world business applications, case studies, and project-based learning. In addition, students learn and apply all the National Standards for Personal Financial Education created by the Council for Economic Education and the Jump$tart Coalition for Personal Financial Literacy.

Course Objectives:
The course is designed to:

- Introduce students to the core business disciplines of entrepreneurship, marketing, finance, accounting, and management using real-world applications.
- Build comprehensive personal financial literacy aligned to national standards.
- Develop workforce-ready skills that support a wide range of business and professional pathways.
- Strengthen students' capacity for decision-making, communication, collaboration, and leadership.

Prerequisite Courses: None.

Applies toward Graduation Requirement of: 1 Career Technical Education credit or Elective credit
*Applies to Financial Lit Requirement if needed.

Jobs for Montana's Graduates (Career Center)	**Credit ½ (each semester)**	**11, 12**
Course Name	**Semester 1 and/or 2**	**Grade Level**

Course Description: The Jobs for Montana's Graduates (JMG) program assists Montana high school students in preparing for life after high school by giving students practical experience with: 21st Century Work/Survival Skills, Entrepreneurship, and Career and Life Exploration. The course is for 11th and 12th grade students who are interested in successfully transitioning from school to work/military or with continuing their education. It also assists struggling students by helping them stay in school and graduate. Ideally, students will come out of the class with some ideas for what they want their life to look like and what career or education they would like to pursue after graduation.

Essential Requirements:

- Employability Skills Curriculum - Career Development, Job Attainment (getting a job), Job Survival (keeping a job), Basic Competencies (including math, reading, writing), Leadership, Self-Development, and Personal Skills.
- Entrepreneurial Skills Curriculum - EMPOWERED curriculum teaches students about economic thinking and gives basic skills required to pursue business ideas. Students experience a market economy in the classroom while participating in activities that allow students to learn while doing. Curriculum culminates in students participating in a Market Day where students have an opportunity to run their own business.
- Montana Career Association - a motivational student organization which fosters the development of leadership, decision-making, assertiveness skills, provides recognition for achievement, and builds self-esteem.
- Job Development and Placement - Job Shadowing experiences that help build critical work skills for future success.
- Post Graduation follow-up - graduates commit to following-up with the JMG teacher for 9 months post graduation.
- Active and productive partnership between business and education.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

***This course applies to the Financial Literacy Credit for graduation.**

FAMILY and CONSUMER SCIENCES

Be prepared for your future by taking advantage of the many courses offered through the Family and Consumer Sciences Department (FCS). These programs enable students to acquire broad, transferable skills for employment and personal life as well as job-specific skills in careers related to early childhood development, education, social and human services, culinary arts, foods and nutrition, food production and management, hospitality and tourism, apparel and interior design, and entrepreneurship. Students can take multiple courses along the various Career Pathways that lead to Industry Recognized Certificates (IRCs) and advanced opportunities for Dual Credits and/or Workplace Credits (Internships/Apprenticeships).

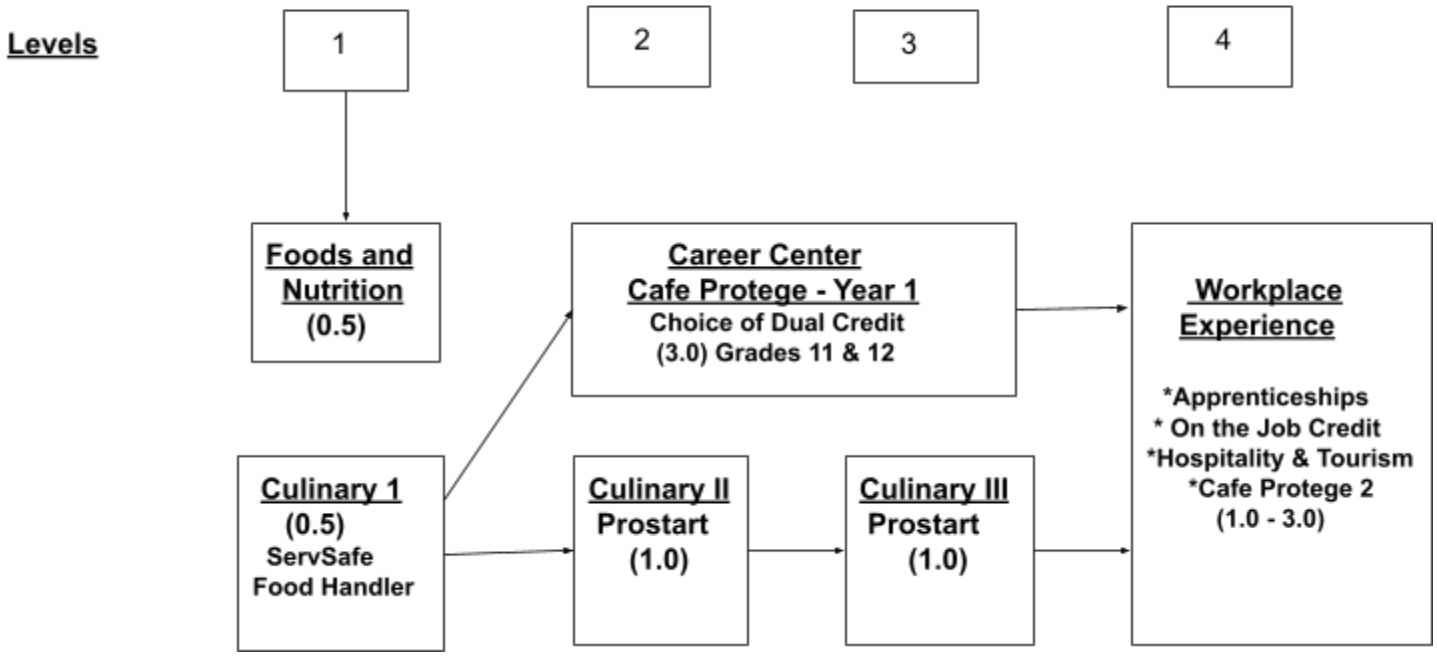
Aligned to the Billings Public School's vision that Career and Technical Education is for EVERY student, the FCS Curriculum aims to provide opportunities for both exploratory experiences and clearly identified pathways to career readiness. To that goal, the FCS curriculum offers three career clusters that articulate to the workplace and/or secondary programs.

- **Culinary Arts**
- **Interior Design**
- **Education/Human Services**

These pathways include opportunities for students to earn Industry Recognized Credentials (IRCs), complete Dual Credit coursework, and to engage in Workplace Experiences within the community.

The following pathways and the included courses align to state and national standards. For a complete list of the knowledge, skills, and learner outcomes from each course, please visit the Billings Public Schools Curriculum Website.

FAMILY AND CONSUMER SCIENCES: CULINARY PATHWAY



Foods and Nutrition	Credit ½	9, 10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course is designed to teach students how to build a lifetime of good nutrition and wellness practices while utilizing food preparation and cooking skills. Students are given the essential tools to understand why and how people need to make more practical and healthy choices in their diet and daily routines. They will work cooperatively in lab groups applying what they have learned in each focus topic. While this course provides personal enrichment, it also serves as a foundation for further training in health and culinary related fields.

Students will learn basic food preparation, nutrition, and food safety skills with a focus on home cooking, teamwork, and time management.

Fees Charged – Lab fee will be assigned by school

Prerequisite Courses: None. Prerequisite for all other Culinary Classes except Adulting 101.

Applies toward graduation requirements of: 1 Career Technical Education credit

Culinary Arts 1	Credit ½	10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course introduces students to fundamental food preparation skills, covering a variety of culinary equipment, techniques, and essential kitchen practices. Topics include kitchen basics, safety and sanitation, knife skills, fruits, vegetables, salads, yeast breads, proteins, entrees, pastries, mother sauces, soups, and protein. While offering personal enrichment, this course also provides a foundational understanding for Culinary Arts II, as well as an introduction to costing and career paths in the culinary field.

Fees Charged – Lab fee will be assigned by school

Potential Industry Recognized Credential - ServSafe Food Handler

Prerequisite Courses: Foods & Nutrition

Applies toward graduation requirements of: 1 Career Technical Education credit

Culinary Arts 2	Credit 1	11, 12
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: This course is designed to teach students about the restaurant industry through the ProStart Curriculum. From culinary techniques to management skills, Culinary Arts 2 industry-driven curriculum provides real-life experience opportunities and builds practical skills and a foundation that will last a lifetime. By bringing together the industry and the classroom, Culinary Arts 2 gives students a platform to discover new interests and talents to open doors for fulfilling careers. It happens through a curriculum that includes all facets of the industry and sets a high standard of excellence for students and the industry.

Fees Charged – Lab fee will be assigned by school.

Potential Industry Recognized Credential - Prostart Level 1

Prerequisite Courses: Foods & Nutrition, Culinary Arts 1, student application

Applies toward graduation requirement of: 1 Career Technical Education credit

**Culinary 2 and 3 have a rotating curriculum. Skyview offers it every other year.

Culinary Arts 3	Credit 1	11, 12
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: This course is an extension for students who have completed prior Culinary Arts courses. Advanced application towards real-life experience opportunities and building practical skills by bringing together the industry and the classroom, Culinary Arts 3 gives students a platform to discover new interests and talents for fulfilling careers in Hospitality and Tourism.

Fees Charged -- Lab fee will be assigned by school.

Potential Industry Recognized Credential - Prostart Level 2

Prerequisite Courses: Foods & Nutrition, Culinary Arts, student application

Applies toward graduation requirement of: 1 Career Technical Education credit

**Culinary 2 and 3 have a rotating curriculum. Skyview offers it every other year.

Cafe Protege
(Culinary Arts for Industry-Career Ctr) 3 Credits (1 ½ credit per semester) 11, 12

Course Name **Semester 1 & 2 (Full Year Course)** **Grade Level**

Course Description: This course is an introduction to the restaurant and foodservice industry covering culinary skills, management, and restaurant operations critical for success in the Foodservice and Hospitality Industry. In addition to the fun and excitement of food preparation and service these topics will be explored:

- Restaurant and foodservice history
- Food and workplace safety
- Knife skills, knife skills, and more knife skills
- Cooking methods and the proper cooking equipment, techniques, and skills
- Stocks, sauces, and soups
- Product identification with meats, vegetables, fruits, grains, and more
- Baking principles and fundamentals of bakeshop production: breads, cookies, cakes, and pastries
- Food cultures and styles from around the United States and the world
- Accounting, food cost controls, marketing
- Catering fundamentals, buffet service, restaurant operations, off-site events
- Entrepreneurial overview: mobile food operations, introduction to entrepreneur basics

Essential Requirements:

- Distinguish the many segments of the foodservice industry
- Become proficient in food safely practices
- Develop and sustain essential knife skills
- Adapt a working knowledge of basic cooking methods
- Identify, purchase, store, and properly cook proteins, vegetables, fruits, grains, and starches and the fundamentals of seasoning and flavoring
- Establish fundamental baking skills and regularly produce breads, cookies, cakes, pies, and pastries
- Participate in menu planning, purchasing, and preparation for buffets and catering events

Cafe Protege will be held at the Lincoln Center. Transportation will be available if needed.

Chef coats and headgear will be provided.

Students are urged and assisted to seek employment in local food service establishments in such roles as paid internships, job shadow, and work study programs. In addition to internships, students will also participate in school district catering projects and local benefits which include: menu planning, purchasing, preparation, set up, service, and clean up.

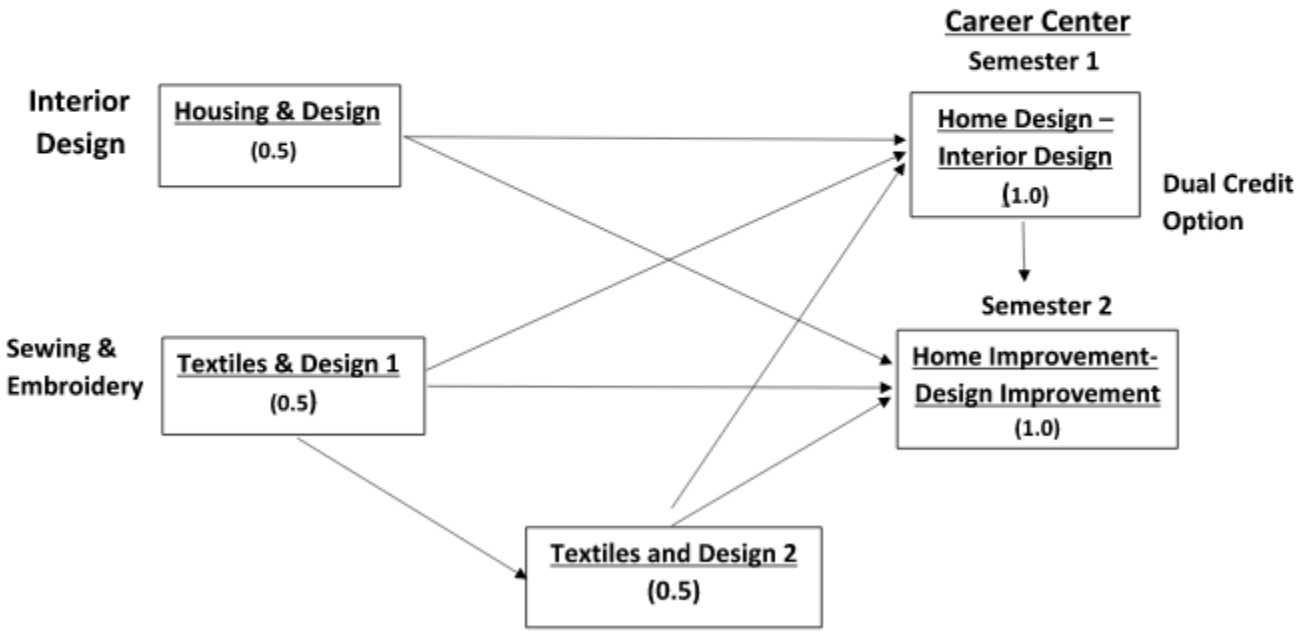
In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

THREE HOUR BLOCK

Prerequisite Courses: Priority is given to students with prior culinary courses.

Applies toward graduation requirements of: 1 Career Technical Education credit

FAMILY AND CONSUMER SCIENCES: INTERIOR DESIGN PATHWAY



Textiles & Design	**Credit ½**	**9, 10, 11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Students will explore the world of textiles, where creativity, skill-building, and self-expression come together to create beautiful and functional works of art. They will focus on fashion and basic hand and machine stitching.

Fees Charged – Lab fee will be assigned by school

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

Textiles & Design 2	**Credit ½**	**9, 10, 11, 12**
Course Name	**Semester 1**	**Grade Level**

Course Description: Students will explore the world of fashion & fibers. Students will stitch, sew, and unleash their creativity in developing and demonstrating advanced textile skills in customized projects.

Fees Charged – Lab fee will be assigned by school

Prerequisite Courses: Textiles and Design 1

Applies toward graduation requirements of: 1 Career Technical Education credit

Housing & Design	**Credit ½**	**9,10, 11, 12**
Course Name	**Semester 2**	**Grade Level**

Course Description: This course is an introduction to space planning and room design while applying design principles to address interior design challenges. This course encompasses topics such as renting & buying homes, design boards, floor plans, and identifying housing styles & trends!.

Fees Charged – Lab fee will be assigned by school

Prerequisite Courses: None.

Applies toward graduation requirements of: 1 Career Technical Education credit

Home Design	Credit 1	
Interior Design (Career Center)	6 Credits @ Gallatin College	11, 12
Course Name	**Semester 1 of Full Year Course**	**Grade Level**

Course Description: This course provides skills with both a computer and hands-on approach to learning. Students complete comprehensive assignments where they apply all of the skills and knowledge obtained throughout the course. They work with community vendors to select: paint, flooring, lighting, tile, appliances, fixtures, and wallpaper for a student-built house. They also learn the basics in AutoCAD and Sketchup. This course is designed to teach the skills needed to be a professional in the design industry and meets the needs of students who desire to receive dual credit for a post-secondary education.

Dual Credit Option: High school students who take Home/Interior Design and Home/Design Improvement for the full year maintaining a C or better have the opportunity to earn both high school and college credit through Gallatin College by enrolling in IDSN 101: Intro to Interior Design (3 credits) and/or IDSN 122: Textiles and Interior Finishes (3 credits).

Essential Requirements:

- Identify factors and characteristics that impact the interiors of a space by applying the elements and principles of design.
- Interpret written and verbal directions for drawing/modeling an interior design project.
- Demonstrate communication skills that promote positive relationships in the workplace by working in cooperative groups to implement a design plan for the Career Center student built house.
- Communicate design ideas through visual and oral presentations.
- Describe careers in the interior design industry by classifying careers that range from entry level to professional.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

TWO HOUR BLOCK

Prerequisite Courses: Priority will be given to students with prior related coursework.

Applies toward graduation requirements of: 1 Career Technical Education credit

Home Improvement Design Improvement (Career Center)	Credit 1 6 Credits @ Gallatin College	11, 12
Course Name	**Semester 2 of Full Year Course**	**Grade Level**

Course Description: This course provides students with the essential skills and knowledge needed to make basic home improvements through a hands-on approach to learning. Students will learn spatial layout and the staging process of the student built home. They will learn how to select product/material, provide an explanation of why selected, and model how to implement their selection in the work room or on site. Highlights include: tape/texture of walls, painting, wallpaper installation, tile installation, mural design, etc. Students will learn from: professional presenters, field trips to industry related companies, and working/practicing on site at the Career Center house. This class will teach basic skills necessary to maintain and enhance a home.

Dual Credit Option: High school students who take Home/Interior Design and Home /Design Improvement for the full year maintaining a C or better have the opportunity to earn both high school and college credit through Gallatin College by enrolling in IDSN 101: Intro to Interior Design (3 credits) and/or IDSN 122: Textiles and Interior Finishes (c credits).

Essential Requirements:

- Calculate quantities, measure, order and install product.
- Students will develop skills needed to complete interior projects on site or in the workroom.
- Will learn how to understand and stay within a budget.
- Students will communicate design ideas through visual and oral presentations to professionals and peers.
- This class will analyze career options available in the home improvement industry.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

TWO HOUR BLOCK

Prerequisite Courses: Priority will be given to students with prior related coursework.

Applies toward graduation requirements of: 1 Career Technical Education credit

College Introduction to Interior Design (Career Center)	Credit 1 3 Credits @ Gallatin College	11, 12
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: This course introduces design as it relates to interior design, architecture and related professions, through the study of the elements and principles of design, tools of design, and an exploration of responsibilities of the profession. The objective of this course is to provide a successful transition from high school to post-secondary education.

This course is embedded within Home Design/Interior Design and Home Improvement/Design Improvement. To qualify for enrollment, students must maintain a grade of C or better in the full year course.

Essential Requirements:

- Demonstrate an understanding of the development of architecture and interior design as professions including technical and regulatory elements, historical, current and future directions by successfully completing exams and/or projects
- Demonstrate the ability to distinguish and apply the terminology utilized in the fields of architecture and interior design
- Demonstrate an understanding and appreciation of the basic principles of architecture and interior design including space planning through the study of the design process, design principles and elements, human perception, building materials, furniture selection, textiles, lighting, color, accessories, human factors and business considerations
- Demonstrate an understanding of the elements and principles of design by successfully creating an elements and principles project
- Demonstrate an understanding of a design concept. An example of this is to create a successful concept board.
- Demonstrate an understanding of the diversity of needs and human factors in planning space with a presentation of their project. Their project and presentation will be done with proficiency.
- Demonstrate an understanding of the fundamentals of environmental design by showing a proficient understanding through project/question-based evaluation.

In the event of over enrollment, first criteria for consideration shall be current daily attendance. Attendance is required and documented.

PART OF A TWO HOUR BLOCK

Prerequisite Courses: Priority will be given to students with prior related coursework.

Applies toward graduation requirements of: 1 Career Technical Education credit

College Textiles and Interior Finishes (Career Center)	Credit 1 3 Credits @ Gallatin College	11, 12
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: This course includes the study of textiles and interior finishes used by interior designers. Students will gain familiarity with a wide range of textile products used in both residential and commercial interiors including fiber content and yarn type, application and labeling, performance and maintenance. Material will also include study the range and application of wall, ceiling, and floor finish materials commonly used in interior design and finally how to communicate these decisions with the design team.

This course is embedded within Home Design/Interior Design and Home Improvement/Design Improvement. To qualify for enrollment, students must maintain a grade of C or better in the full year course.

Essential Requirements:

- Demonstrate knowledge of textile characteristics including fiber, yarn, construction, and finishes by identifying, classifying, and evaluating material samples.
- Demonstrate an understanding of textile applications and performance criteria for residential and commercial interiors through written exams and applied design projects.
- Apply appropriate standards for textile labeling, codes, and maintenance in material selection exercises.
- Demonstrate an understanding of various wall, ceiling, and floor finishes and their relationship to design function, aesthetics, and building systems.
- Accurately specify materials and finishes for a design project and communicate these selections using professional documentation methods such as specification sheets, material boards, and digital presentations.
- Integrate sustainability principles in the evaluation and selection of textiles and finishes.
- Demonstrate effective collaboration and communication with peers and the design team in presenting finish concepts.
- Exhibit professional work habits including responsibility, time management, and attention to detail through participation and project completion.

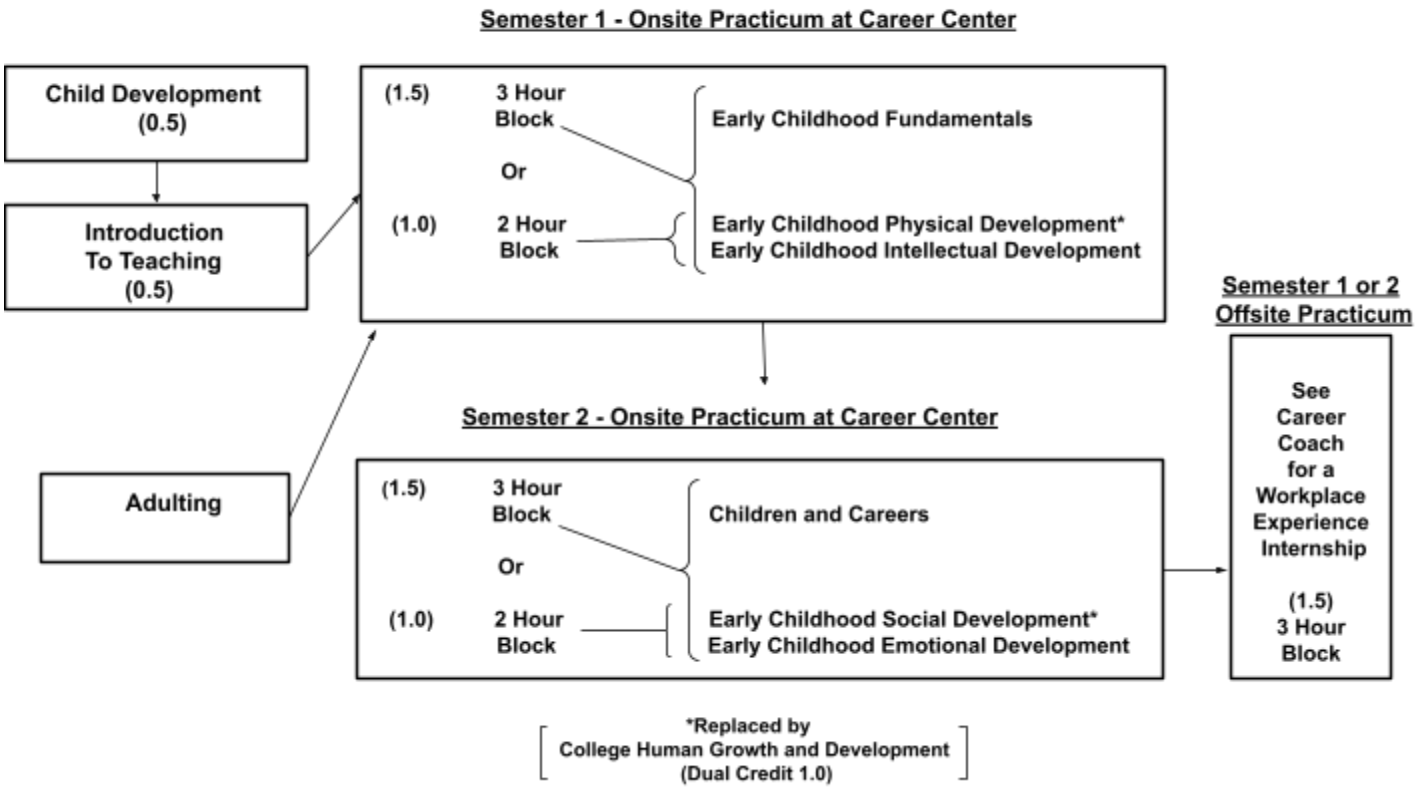
In the event of our over enrollment, first criteria for consideration shall be current daily attendance. Attendance is required and documented.

PART OF A TWO HOUR BLOCK

Prerequisite Courses: Priority will be given to students with prior related coursework.

Applies toward graduation requirements of: 1 Career Technical Education credit

FACS: Education/Human Services Pathways



*Replaced by
College Human Growth and Development
(Dual Credit 1.0)

Child Development	Credit ½	11, 12
Course Name	**Semester 2**	**Grade Level**

Course Description: Students will learn to prepare for the significant responsibility of parenting and gain valuable employment skills in childcare, early childhood education, and related fields. Engage in experiential learning through the Reality Works Infant Simulators and Child Care Experience Program. This class focuses on the readiness for parenting, exploration of pregnancy, and caring for, nurturing, and guiding the child from birth to school age.

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

Intro to Teaching	Credit ½	11, 12
Course Name	**Semester 2**	**Grade Level**

Course Description: This course is an introduction to exploring and experiencing the career of teaching. Students will be introduced to the principles of underlying teaching and learning, the responsibilities and duties of teachers, and the techniques of imparting knowledge and information. This course will expose students to training themes in classroom management, student behavior, leadership and human relations skills, assessment of student progress, teaching strategies, and various career opportunities in the field of education. Participants must prepare a portfolio of the teaching career, prepare and execute a complete lesson plan, and an oral presentation. All students will also complete a shadow experience with an educator outside of the classroom throughout the semester.

Prerequisites: Child Development is recommended.

Applies toward graduation requirements of: 1 Career Technical Education credit

Early Child Physical Development Early Child Intellectual Development (Career Center)	Credit 1 3 Credits @ MSU Billings	11, 12
Course Name	**Semester 1**	**Grade Level**

Course Description: You will gain practical teaching experience in one of the two Career Center Preschools, after learning teaching techniques in the high school classroom pertaining to children's physical, social, emotional, and cognitive development. Emphasis is placed on education through physical and intellectual development. Opportunities are provided to learn what is entailed in various specialized fields such as special education, speech, physical and occupational therapies, and pediatric nursing. Whatever path in life you choose, children will likely be a part of it; don't miss this opportunity to brighten your life and the lives of many children.

Dual Credit Option: High school students who take Early Childhood for the full year, have the opportunity to earn both high school and college credit through MSU Billings by enrolling in EDU 220/220L: Human Growth & Development with Lab.

Essential Requirements:

- Early childhood education training
- Teaching in the preschool
- Lesson planning for preschool
- Observation of preschool children
- Study of areas of child development
- Written evaluations

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

TWO HOUR BLOCK

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit.

Early Child Fundamentals
Early Child Physical Development

Early Child Intellectual Development	**Credits 1 ½**	
(Career Center only)	**3 Credits @ MSU Billings**	**11,12**
Course Name	**Semester 1**	**Grade Level**

Course Description: Along with gaining practical teaching experience in the Career Center Preschools and learning techniques pertaining to children's development, this class stresses thematic lesson planning and teaching through centers. Opportunities are provided detailing specialized fields such as special education, speech, physical and occupational therapies, and pediatric nursing. This class provides in depth instruction for those considering early childhood education.

Dual Credit Option: High school students who take Early Childhood for the full year, have the opportunity to earn both high school and college credit through MSU-B by enrolling in EDU 220/220L: Human Growth & Development with Lab.

Essential Requirements:

- Same as listed above.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

THREE HOUR BLOCK

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit.

Early Child Social Development **Early Child Emotional Development** **(Career Center only)**	**Credit 1** **3 Credits @ MSU Billings**	**11, 12**
Course Name	**Semester 2**	**Grade Level**

Course Description: You will gain practical teaching experience in one of the two Career Center Preschools, after learning teaching techniques in the high school classroom pertaining to children's physical, social, emotional, and cognitive development. Emphasis is placed on education through social and emotional development. Opportunities are provided to learn what is entailed in various specialized fields such as special education, speech, physical and occupational therapies, and pediatric nursing. Whatever path in life you choose, children will likely be a part of it; don't miss this opportunity to brighten your life and the lives of many children.

Dual Credit Option: High school students who take Early Childhood for the full year have the opportunity to earn both high school and college credit through MSU-B by enrolling in EDU 220/220L: Human Growth & Development with Lab.

Essential Requirements:

- Early childhood education training
- Teaching in the preschool
- Lesson planning for preschool
- Observation of preschool children
- Study of areas of child development
- Written evaluations

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

TWO HOUR BLOCK

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

Children & Careers

Early Child Social Development
Early Child Emotional Development **Credit 1 ½**
(Career Center only) **3 Credits @ MSU Billings** **11, 12**

Course Name	**Semester 2**	**Grade Level**

Course Description: Along with gaining practical teaching experience in the Career Center Preschools and learning techniques pertaining to children's development, this class stresses thematic lesson planning and teaching through centers. Opportunities are provided to learn what is entailed in various specialized fields such as special education, speech, physical and occupational therapies, and pediatric nursing. This class provides in depth instruction for those considering early childhood education.

Dual Credit Option: High school students who take Early Childhood for the full year, have the opportunity to learn both high school and college credit through MSU-B by enrolling in EDU 220/220L: Human Growth & Development with Lab.

Essential Requirements:

- Same as listed above.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

THREE HOUR BLOCK

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

College EDU Human Growth & Development (Career Center only)	Credit 1 3 Credits @ MSU Billings	11, 12
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: This class presents a comprehensive introduction to the study of human development including the developmental capabilities and needs of humans at different ages with respect to the physical, psychomotor, cognitive, social, emotional, and psychological domains that affect all education. The course includes 4.5 - 5 hrs per week lab at the Career Center Preschool. Students who successfully complete this full-year course will earn 3 college credits for EDU 220/220L through MSU-Billings.

Essential Requirements:

- Early childhood education training
- Teaching in the preschool
- Lesson planning for preschool
- Observation of preschool children
- Study of areas of child development
- Written evaluations
- Research Paper
- Case Study Paper
- Final Project

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

This year-long course is designed to be taken as part of a block schedule within the Early Childhood Education Program.

TWO HOUR BLOCK

This course is offered as part of a **two hour block** with *Early Child Physical & Intellectual Development* (Semester 1) and *Early Child Social & Emotional Development* (Semester 2).

-or-

THREE HOUR BLOCK

The course is offered as part of a **three hour block** with *Early Child Fundamentals* and *Early Child Physical & Intellectual Development* (Semester 1) and *Child and Careers* and *Early Child Social & Emotional Development* (Semester 2).

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

Stand Alone FACS Course

Adulting 101	**Credit ½**	**11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course is designed to provide skills to live independently after high school whether away at college or on their own. This course covers nutrition and basic meal preparation, basic clothing repair, and money management.

Fees Charged – Lab fee will be assigned by school.

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

Unified Adulting	**Credit ½**	**Reg. Ed. 10, 11, 12** **Spec. Ed. 9, 10, 11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: The Adulting course brings together students with and without disabilities for a Family and Consumer Science class with the goal of enhancing the physical, intellectual, and social growth of all. The class focuses on increasing the ability, specific skills, and problem solving ability of the student. It also reinforces positive habits and confidence through the use of activities. The teacher will facilitate a learning atmosphere in which typically developing peers learn to better understand their classmates' needs and learn to find creative ways to adapt instruction. The class naturally fosters new friendships among the Unified Adulting classmates and promotes students' leadership and social competencies. In Unified Adulting, individualism and inclusion naturally coexist. The environment is rich in encouragement, trust, and lasting friendship.

Regular education students can only take one time or are required to have instructor approval. Special education students may take the course multiple times.

Prerequisite Courses: None

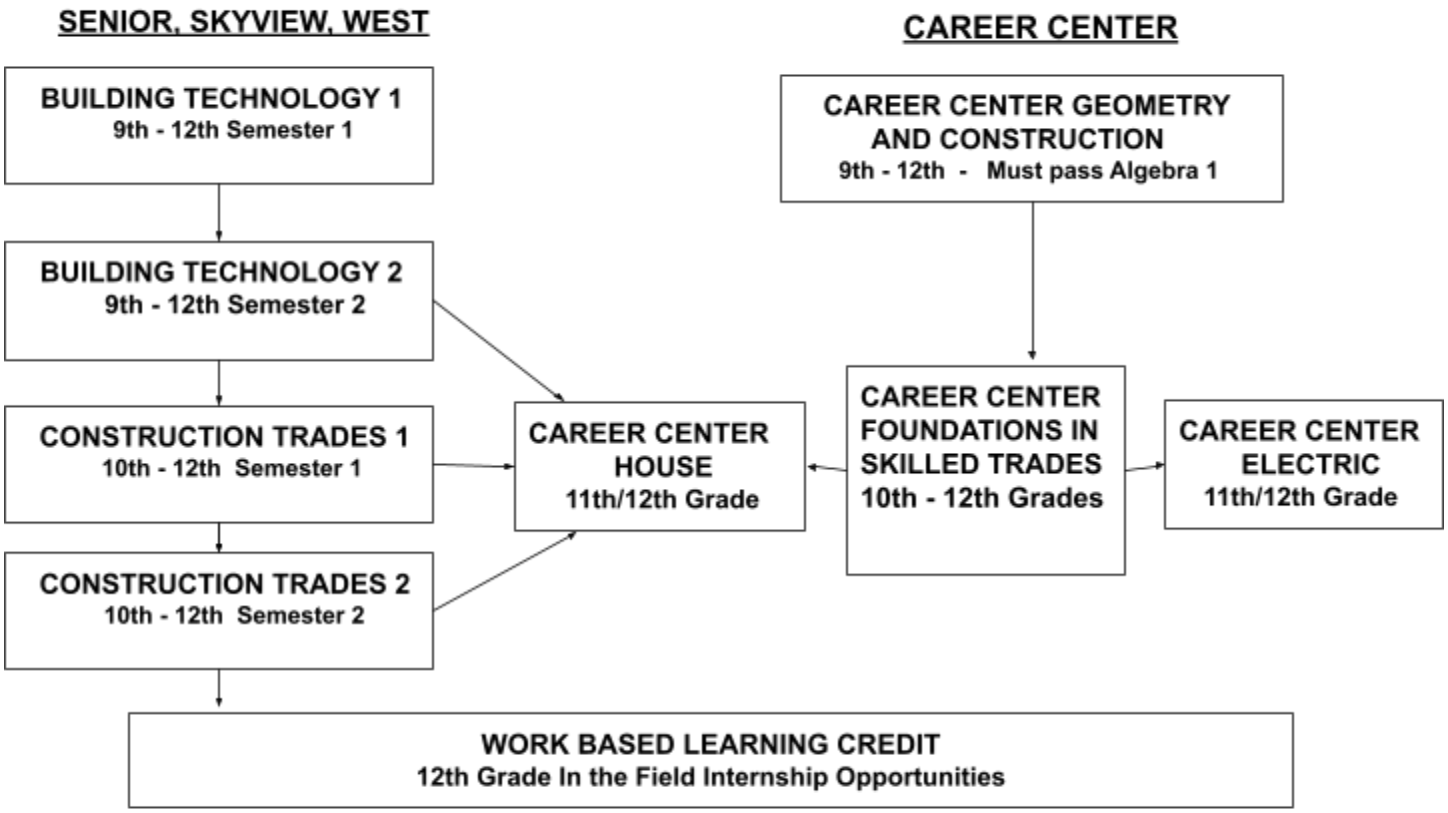
Applies toward graduation requirements of: 7 Elective credits

TECHNOLOGY EDUCATION

Students today need to be prepared for the future. They will need to have basic skills in areas such as: computers, design, building and testing different products, brainstorming, communication, computer controlled systems, robotics, lasers, and many other technologies in order to be prepared for the future. Most of these can be accomplished in the classes offered in the Technology Education area.

All of the classes offered in the Technology Education area are hands on activities.
If these classes sound like they are something you would like to do to prepare for your future, sign up today.

BPS CONSTRUCTION PATHWAYS



*Construction
*Electrical
*Plumbing

*HVAC
*Concrete/Masonry
*Design & Drafting

Building Tech 1 (Pre-Construction)	Credit ½	9, 10, 11, 12
Course Name	**Semester 1**	**Grade Level**

Course Description: Students who want to build houses, learn basic woodworking skills, or be in the carpentry trade will enjoy learning the skills it takes to successfully design and build from scratch. This is an entry level program oriented around the basic building blocks necessary to pursue a career in construction. Students will discover basic wiring, simple framing, and product production. Building Tech 1 is about sequential project planning, trade math, tool identification and safety use, and small project completion. Time honored building concepts and procedures will be taught and measured in pursuit of a work based learning environment leading to industry employment.

Prerequisite Courses: None
Applies toward graduation requirements of: 1 Career Technical Education credit

Building Tech 2 (Pre-Construction 2)	Credit ½	9, 10, 11, 12
Course Name	**Semester 2**	**Grade Level**

Course Description: Building Tech 2 takes the building blocks of Building Tech 1 to a more advanced level. This class will incorporate design basics of both construction and fabrication. Students will continue to challenge themselves to gain a better understanding of the skills and jobs in the construction industry. Students will explore manufacturing processes, small project designs, and entrepreneurial concepts.

Prerequisite Courses: Building Tech 1
Applies toward graduation requirements of: 1 Career Technical Education credit

Construction/Trades 1 & 2	Credit ½	10, 11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Construction is a program that provides employment preparation and technical training to high school students for a wide range of opportunities within the construction industry. This course will focus on employment preparation skills for entering the workforce in a number of trades. Some areas of focus will be safety certifications, measuring, and plan reading. Residential and commercial construction experience will include fabrication, installation, service or maintenance and warehouse opportunities. Hands-on training will be emphasized throughout the course with training related to carpentry, cabinetry, framing, roofing, flooring, windows and doors, molding and millwork. Some electrical, plumbing and HVAC will also be constructed throughout this course.

This course will work directly with industry partners helping to provide career opportunities as well as using the High School Career Coaches as job preparation specialists.

Prerequisite Courses: Building Tech 2 for Construction/Trades 1
Construction/Trades 1 for Construction/Trades 2
Applies toward graduation requirements of: 1 Career Technical Education credit

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		Reg. Ed. 10, 11, 12
Unified Building	**Credit ½**	**Spec. Ed. 9, 10, 11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: The Unified Building course brings together students with and without disabilities for a tech ed building class with the goal of enhancing the physical, intellectual, and social growth of all. The class focuses on increasing the physical ability, project-specific skills, and problem solving ability of the student. It also reinforces positive habits and confidence through the use of projects. The teacher will facilitate a learning atmosphere in which typical developing peers learn to better understand their classmates' needs and learn to find creative ways to adapt instruction. The class naturally fosters new friendships among the Unified Building classmates and promotes students' leadership and social competencies. In Unified Building, individualism and inclusion naturally coexist. The environment is rich in encouragement, trust, and lasting friendships.

Regular education students can only take one time or are required to have instructor approval. Special education students may take the course multiple times.

Prerequisite Courses: None
Applies toward graduation requirements of: 7 Elective credits

	Credits 2	
Technical Geometry	**1 Math-1 Career Technical**	
Geometry in Construction - Career Center	**Education**	**9, 10, 11**
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: This course is designed to show the relevance of Geometry through a variety of practical applications related to but not limited to the construction industries. Students will be: participating in hand-on activities, working in a classroom & shop setting, participating in the construction of a house, and investigating business components in construction and related industries. Students who are interested in architecture, interior design, engineering, construction management, drafting, building trades (electrical, plumbing, etc.) as well as all aspects of manufacturing would benefit from this course. The objectives of this course are to promote academic rigor and real world relevance by having students solve multi-step problems, engage in math concepts that appear in different phases of construction and work in a team setting.

Essential Requirements:

- Students will participate in all aspects of safety, related to construction and manufacturing industries.
- Students will work in shop and construction site environments.
- Students will successfully complete the Geometry requirements as indicated in the All Billings Curriculum.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

TWO HOUR BLOCK

Prerequisite Courses: Algebra 1 with a "C" grade or better
Applies toward graduation requirements of: 2 Math credits and 1 Career Technical Education credit

Foundations in Skilled Trades	Credit ½	10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Foundations in Skilled Trades introduces students to the essential skills and knowledge required for a variety of in-demand trades. This hands-on course provides foundational instruction in plumbing, HVAC (Heating, Ventilation, and Air Conditioning), masonry, tiling, and other key construction and technical fields.

Students will learn basic principles, safety protocols, and industry-standard techniques while using professional tools and materials. Through practical projects and real-world problem-solving, participants will gain valuable insight into the skills
and career opportunities available in the trades.

This course is ideal for students interested in exploring multiple trades as potential career paths or seeking to develop practical skills for personal and professional use.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

Construction Fundamentals 1
Carpentry 1 **Credit 1 ½**
Construction Technique 1 (Career Center) **4 Credits @ City College MSU Billings** **11, 12**

Course Name **Semester 1 of Full Year Course** **Grade Level**

Course Description: First year house construction students will work hands-on in the construction of this year's student-built house. This is a real house you will be building. Students will develop skills and valuable construction knowledge in the first phases of the building construction trades. Students will learn the dynamics of a real residential house construction site. Students will receive on the job training as they learn the trades and experience the work ethics of residential construction. Students will complete: safety training, framing, stairs, roofing, exterior window and door installation, soffit and fascia, heating and cooling (with subcontractors), plumbing (with subcontractors), insulation, and drywall hanging.

Dual Credit Option: High school students have the opportunity to earn both high school and college credit through City College MSU-B by enrolling in CSTN 120: Carpentry Basics and Rough-in Framing.

Essential Requirements:

- Students must have strong math skills and be comfortable with fractions.
- Students must be able to read and understand a tape measure.
- Students should have some understanding of the following equation: $a^2 + b^2 = c^2$
- Ability to work safely, independently and as part of a team, and without constant supervision are critical to this class.
- Attendance is extremely important as this is a hands-on class building a house and make up work is difficult to replicate.

NOTE: This is a mostly outdoor class. Students will be exposed to the elements and working in temperatures ranging from 20 to 100 degrees. You will get hot, cold, and dirty.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

THREE HOUR BLOCK
Fall Enrollment Only

Students must take prerequisite courses from their home high school or the Career Center or have instructor/administrator approval to take this course.

Home High School Prerequisite Courses: At least one year in the Building Tech/Construction Trades pathway with a "C" or better; Or Build Tech 1 along with one year of Geometry with a "C" or better.

Career Center Prerequisite Courses: Geometry in Construction with a "C" or better; Or Foundations in Skilled Trades along with completion of one year of Geometry with a "C" or better; Or Interior Design & Design Improvement with a C or better.

Applies toward graduation requirements of: 1 Career Technical Education credit

Construction Fundamentals 2
Carpentry 2 **Credit 1 ½**
Construction Technique 2 (Career Center) **4 Credits @ City College MSU Billings** **11, 12**

Course Name	**Semester 2 of Full Year Course**	**Grade Level**

Course Description: First year house construction students will continue to work hands-on in the construction of this year's student-built house. Students will develop skills and valuable construction knowledge in the finishing phases of the building construction trades. Students will learn the dynamics of a real residential house construction site. Students will receive on the job training as they learn the trades and experience the work ethics of residential construction. Students will complete: insulation, drywall hanging, drywall taping, interior door installation, trim out and finish carpentry, cabinet installation, floor coverings, siding and stone applications, deck building, and all aspects of detailing out a new house.

Dual Credit Option: High school students have the opportunity to earn both high school and college credit through City College MSU-B by enrolling in CSTN 142: Interior and Exterior Finishing.

Essential Requirements:

- Students must have strong math skills and be comfortable with fractions.
- Students must be able to read and understand a tape measure.
- Students should have some understanding of the following equation: $a^2 + b^2 = c^2$
- Ability to work safely, independently and as part of a team, and without constant supervision are critical to this class.
- Attendance is extremely important as this is a hands-on class building a house and make up work is difficult to replicate.

NOTE: This is a mostly outdoor class. Students will be exposed to the elements and working in temperatures ranging from 20 to 100 degrees. You will get hot, cold, and dirty.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

THREE HOUR BLOCK
Fall Enrollment Only

Prerequisite Courses: Construction Fundamentals 1, Carpentry 1, Construction Technique 1 with a grade of "C" or better or with instructor/administrator approval.

Applies toward graduation requirements of: 1 Career Technical Education credit

Building Trades 1
House Building 1
Construction Technique 3(Career Center) Credits 1 ½ **12**

Course Name **Semester 1 of Full Year Course** **Grade Level**

Course Description: Second year house construction students will work with first year students to complete this year's student-built house. The second-year student will serve as a leader to demonstrate good work ethics and help guide first year students through the building construction trades. Second year students will expand their knowledge and refine their skills as they work to complete a second house. The second-year student should achieve greater proficiency in their work and the development of their skills. Students will complete: framing, stairs, roofing, exterior window and door installation, soffit and fascia, heating and cooling (with subcontractors), plumbing (with subcontractors), insulation, and drywall hanging.

Dual Credit Option: If a student did not earn College Credit in their previous year of construction, they may enroll in CSTN 120: Carpentry Basics and Rough-in Framing through City College MSU-B.

College Credit available through City College-MSU Billings. Please see your counselor for more information.

Essential Requirements:

- THIS IS NOT JUST A REPEAT OF 1ST YEAR HOUSE CONSTRUCTION. Second year students will be held to much higher standards!
- Second year students will take on more challenges than 1st year students and will need strong problem- solving skills (material estimations, more complex wall and truss layouts, stair building, etc).
- Students must have strong math skills and be comfortable with fractions.
- Students must be able to read and understand a tape measure.
- Student must understand the following equation: $a^2 + b^2 = c^2$
- Ability to work safely, independently and as part of a team, and without constant supervision are critical to this class.
- Attendance is extremely important as this is a hands-on class building a house and make up work is difficult to replicate.

NOTE: This is a mostly outdoor class. Students will be exposed to the elements and working in temperatures ranging from 20 to 100 degrees. You will get hot, cold, and dirty.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

THREE HOUR BLOCK

Prerequisite Courses: Construction Fundamentals 1 & 2, Carpentry 1 & 2, Construction Technique 1 & 2 with a grade of “B” or better or with instructor/administrator approval.

Applies toward graduation requirements of: 1 Career Technical Education credit

Building Trades 2
House Building 2
Construction Technique 4(Career Center) Credits 1 ½ **12**

Course Name **Semester 2 of Full Year Course** **Grade Level**

Course Description: Second year house construction students will receive the hands-on training that comes with working through the last phases of house construction. Second year students will experience the challenges of house construction with a greater level of understanding. Students will benefit from the development of skills with a higher proficiency and the diverse knowledge that comes with two years of training. Students will enter the job market with confidence and success. Students will complete: insulation, drywall hanging, drywall taping, interior door installation, trim out and carpentry, cabinet installation, floor coverings, siding and stone applications, deck building, and all aspects of detailing out a new house.

Dual Credit Option: If a student did not earn College Credit in their previous year of construction, they may enroll in CSTN 142: Interior and Exterior Finishing through City College MSU-B.

Essential Requirements:

- THIS IS NOT JUST A REPEAT OF 1ST YEAR HOUSE CONSTRUCTION. Second year students will be held to much higher standards!
- Second year students will take on more challenges than 1st year students and will need strong problem- solving skills (specialized door installation, complicated finish carpentry such as tray ceilings and stair trim, siding installation in non rectangular spaces, material estimations, stone mailbox construction, etc).
- Students must have strong math skills and be comfortable with fractions.
- Students must be able to read and understand a tape measure.
- Students must understand the following equation: $a^2 + b^2 = c^2$.
- Ability to work safely, independently and as part of a team, and without constant supervision are critical to this class.
- Attendance is extremely important as this is a hands-on class building a house and make up work is difficult to replicate.

NOTE: This is a mostly outdoor class. Students will be exposed to the elements and working in temperatures from 20 to 100 degrees. You will get hot, cold, and dirty.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

THREE HOUR BLOCK

Prerequisite Courses: Building Trades 1, House Building 1, Construction Technique 3 with a grade of “B” or better or with instructor/administrator approval.

Applies toward graduation requirements of: 1 Career Technical Education credit

Drafting Careers Exploration (Senior & Career Center)	**Credit ½**	**9, 10, 11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Geared for students with an interest in careers that use drafting skills and applications. Drafting Careers Exploration courses expose students to the opportunities available for drafts people (engineering, architectural, industrial, and so on). These courses serve to introduce basic skills and the field in general, providing students with the opportunity to identify a focus for continued study or to determine that their interests lie elsewhere.

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

CAD Design & Software (Senior Only)	**Credit ½**	**9, 10, 11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course is offered as an intermediary step to more advanced drafting courses. Though introduced in the Drafting Careers Exploration course, CAD Design and Software courses provide students with a more in-depth application to Computer-Aided Drafting (CAD) systems available in the industry. Students will be provided a more focused attention on particular areas of expertise.

Prerequisite Courses: Successful completion of Drafting Careers Exploration

Applies toward graduation requirements of: 1 Career Technical Education credit

COMPUTER PROGRAMMING AND INFORMATION TECHNOLOGY

PLTW Computer Science Essentials

PLTW Computer Science A

PLTW Cybersecurity

PLTW Game Design and Development

Web Page 1

Web Page 2

Collinge Intro to Web Design and Programming

Technology Lab	Credit ½	9, 10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Technology Lab provides the student with exposure to a variety of technical areas. Each activity ties to one or more classes. This allows students to try out a topic before committing to a semester course. A variety of software programs and simulations are utilized as well as computer hardware and programmable robots.

Major Topics Include:
Robotics, web page design, animation, design and problem solving, introductory programming, computer hardware, graphic design, drafting and pre-engineering.
No prior experience is necessary and each activity lasts approximately 2 weeks.

Prerequisite Courses: None. Completion of Algebra 1 or higher is recommended.

Applies toward graduation requirements of: 1 Career Technical Education credit

Computer Programming 1	Credit ½	9, 10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: The students will learn to code and debug programs for the PC. The logic involved in writing programs is developed through the structured format of the JavaScript/CSS programming language. Students will learn to use programming to solve practical problems and to introduce potential career paths in the Information Technology (IT) industry. The course is designed to teach a “structured” approach to writing programs so that skills learned can easily be transferred to other languages and computer applications.) At the end of the semester students develop a final project.

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

Computer Programming 2	Credit ½	9, 10, 11, 12
Course Name	**Semester 2**	**Grade Level**

Course Description: The coursework starts where Computer Programming 1 leaves off and involves problems that challenge the student in JavaScript and introduces them to advanced computer programming concepts. The emphasis is on a “structured” approach to programming so that skills learned can easily be transferred to other computer languages and applications. At the end of the semester students develop a final project.

Prerequisite Courses: Successful completion of Computer Programming 1

Applies toward graduation requirements of: 1 Career Technical Education credit

Computer Programming 3	Credit ½	10, 11, 12
Course Name	**Semester 2**	**Grade Level**

Course Description: Students expand language knowledge base by learning and applying Python. Hardware/software constraints are examined and integrated into software development. Students finish the semester by developing a project of their own choosing.

Prerequisite Courses: Successful completion of Computer Programming 2

Applies toward graduation requirements of: 1 Career Technical Education credit

Computer Programming 4	Credit ½	10, 11, 12
Course Name	**Semester 2**	**Grade Level**

Course Description: Students in Computer Programming 4 will explore the integration of hardware and software in a fast paced hands-on environment. Exploration of electronics will be coupled with embedded software written by the students to meet design parameters. Students will program microprocessor controllers and use sensors to build digital projects, including robots, to solve designated problems.

Prerequisite Courses: Successful completion of Computer Programming 3

Applies toward graduation requirements of: 1 Career Technical Education credit

Leadership Education & Training 1 (West High Only)	½ Credit per semester Starting Fall 2025/Spring 2026	9 10, 11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: This course includes classroom instruction and laboratory instruction in the history, customs, traditions and purpose of Army JROTC. It contains the development of basic leadership skills to include leadership principles, values, and attributes. Development of core skills students should master and an appreciation for diversity and active learning strategies are integrated throughout the course. The performance standards in this course are based on the performance standards identified in the curriculum for the Army JROTC. Successful completion of at least three units of credit in the Army JROTC program will qualify the student for advanced placement in a college ROTC program or accelerated promotion in the military service.

Prerequisite Courses: None *Students must be in Semester 1 to take Semester 2. It is recommended that students take both semesters.

Applies toward graduation requirements of: 7 Elective credits

Leadership Education & Training 2 (West High Only)	½ Credit per semester Starting Fall 2026/Spring 2027	10, 11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: This course includes classroom instruction and laboratory instruction expanding on skills taught in LET 1. It provides instruction on leadership styles and practical time to exercise leadership theories as well as the basic principles of management. It provides self assessments that help students determine their skill sets and opportunities to each using acceptable principles and methods of instruction. The performance standards in this course are based on the performance standards identified in the curriculum for the US Army JROTC. Successful completion of at least three units of credit in the Army JROTC program will qualify the student for advanced placement in a college ROTC program or accelerated promotion in the military service.

Prerequisite Courses: LET 1 Course *Students must be in Semester 1 to take Semester 2. It is recommended that students take both semesters.

Applies toward graduation requirements of: 7 Elective credits

Leadership Education & Training 3 (West High Only)	½ Credit per semester Starting Fall 2027/Spring 2028	11, 12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: This course includes classroom instruction and laboratory instruction expanding on the skills taught in LET 1-2. This course allows cadets to investigate the interrelationships of the services while it continues to build their leadership development and decision-making skills. It includes negotiation skills and management principles. It emphasizes staff procedures and provides opportunities to handle various leadership situations. The research, identification, planning and execution of service learning activities are included. The performance standards in this course are based on the performance standards identified in the curriculum for the US Army JROTC. Successful completion of at least three units of credit in the Army JROTC program will qualify the student for advanced placement in a college ROTC program or accelerated promotion in the military service.

Prerequisite Courses: LET 2 Course *Students must be in Semester 1 to take Semester 2. It is recommended that students take both semesters.

Applies toward graduation requirements of: 7 Elective credits

Leadership Education & Training 4 (West High Only)	½ Credit per semester Starting Fall 2028/Spring 2029	12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: This course includes classroom instruction and laboratory instruction expanding on the skills taught in the LET 1 - 3. It focuses on creating a positive leadership situation, negotiation, decision-making, problem solving, planning team development, project management and mentoring. It provides the opportunity to demonstrate leadership potential in an assigned command or staff position within the cadet battalion organization structure. It includes how to use emotional intelligence in leadership situations as well as developing a positive attitude, preventing violence, and managing anger. The performance standards in this course are based on the performance standards identified in the curriculum for the US Army JROTC. Successful completion of at least three units of credit in the Army JROTC program will qualify the student for advanced placement in a college ROTC program or accelerated promotion in the military service.

Prerequisite Courses: LET 3 Course *Students must be in Semester 1 to take Semester 2. It is recommended that students take both semesters

Applies toward graduation requirements of: 7 Elective credits

OTHER ELECTIVES

University Connection	Credit ½ Each Semester	11, 12
Course Name	**Semesters 1 and/or 2**	**Grade Level**

Course Description: This course is designed to allow students to seek dual credit through college and university systems while enrolled in high school. Please contact your counselor if you are seeking dual credit for a university course while enrolled in high school.

Essential Requirements:

- Students cannot earn credit for courses that are offered at the home school
- Students may earn dual credit if declared in advance
- Students attend class on college campus or online through college
- Students are responsible for tuition and transportation

Prerequisite Courses: Counselor and administrative approval

Applies toward graduation requirements of: 7 Elective credits

Forensics/Speech	Credit ½	9, 10, 11, 12
Course Name	**Semesters 1 and or 2**	**Grade Level**

Course Description: Speech is a semester course for those wishing to work on their public speaking skills. Interpretation of literature, improvisation, and impromptu speaking, as well as formal speaking are covered. This course is for that student who is highly motivated and interested in developing skills for performing before an audience.

Prerequisite Courses: None

Applies toward graduation requirements of: 7 Elective credits

Forensics/Debate	Credit ½	9, 10, 11, 12
Course Name	**Semesters 1 and or 2**	**Grade Level**

Course Description: Debate is a semester course for students who wish to receive extensive training in competitive debate and to perform in competition throughout the State. This course is for that student who is highly motivated and interested in developing skills for competitive debating before judges.

Prerequisite Courses: None

Applies toward graduation requirements of: 7 Elective credits

College Intro to Public Speaking	Credits ½ 3 Credits @ MSU Billings	11, 12
Course Name	**Semester 1 and or 2**	**Grade Level**

Course Description: Students develop speaking abilities as they acquire an understanding of basic rhetorical theory and its application in a variety of speech situations. Listening, speaking, and critiquing abilities are emphasized. This course addresses the following topics: speech preparation and delivery, forming and fielding questions, audience analysis, listening skills, critiquing and speaker anxiety.

This course is the equivalent of COMX 111 Introduction to Public Speaking-(3 Credits) at MSU-Billings

Prerequisite Courses: None

Applies toward graduation requirements of: ½ Elective credit

College Creative Writing	Credit ½ 3 Credits @MSU Billings	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Provides students with a versatile platform for honing their writing skills and cultivating their distinctive style across a wide spectrum of literary forms, including poetry, short stories, drama, essays, and various prose genres. While the primary focus is on the act of writing itself, this course also delves into the exploration of exemplary works and authors as models to enrich students' understanding of the art and craft of writing. The course introduces the fundamental principles and techniques essential for creative writing. From personal expressions in simple narratives and descriptions to the foundational elements of fiction and poetry, students embark on a creative journey that fuels their development as writers.

This course is the equivalent of CRWR 240, Introduction to Creative Writing Workshop, at MSU Billings.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

Prerequisite Courses: None

Applies toward graduation requirements of: 7 Elective credits

College Intro to Literature	Credit ½ 3 Credits @MSU Billings	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Provides the opportunity for students to study and reflect upon the themes presented in the body of literature being presented (short and long fiction, dramatic and lyric poetry). This course emphasizes comprehension, discernment, and critical thinking skills while students determine the underlying assumptions and values within the reading selections. Students will study how works of literature reflect society's problems and culture while studying advanced literary techniques (irony, satire, connotation, rhythm, etc). Oral discussion is an integral part of literature courses and written assignments are an additional method to develop analytical skills. The literature selections may reflect a specific genre or theme or a particular time period or people.

This course is the equivalent of LIT 110 Introduction to Literature (3 Credits) at MSU Billings.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

Prerequisite Course: None

Applies toward graduation requirements of: 7 Elective credit

YEARBOOK PUBLICATIONS

Bronc Express – Senior	**Credit 1**	**10, 11, 12**
Wingspan - Skyview	**Credit 1**	**10, 11, 12**
Westward Annual - West	**Credit 1**	**10, 11, 12**
Course Name	**Semesters 1 & 2**	**Grade Level**

Course Description: This course is designed to teach the skills necessary to work as a member of a publication team including writing articles, designing paper layouts, taking photographs, interviewing, proofreading, sales, fundraising, and other necessary tasks to produce a quality yearbook.

Prerequisite Courses: "C" average in English. Students must also realize that the class requires some after-school time and peer to peer sales.

Applies toward graduation requirements of: 7 Elective credits

MULTIMEDIA PUBLICATIONS

Digital Media Design & Production

Senior only	**Credit 1**	**10, 11, 12**
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: Digital Media Design and Production courses teach students the fundamentals of graphic design and production and provide students with the opportunity to apply these principles to printed media, digital presentation media, and interactive media. This course is designed to teach the skills necessary to work as a member of a publication team. Along with publishing the school newspaper, students design the newspaper and magazine productions, set publishing dates and adhere to them, determine article topics, research topics, conduct interviews, write and edit articles weekly, take and create press ready photographs, and design and prepare pages for publication. Emphasis is placed on learning and using technology. Students gain a good working knowledge of computers, digital cameras, and professional software.

Prerequisite Courses: Minimum of a C in English. Students must also realize that the class requires some after school time.

Applies toward graduation requirements of: 1 CTE credit or 7 Elective credit

Peer Tutoring Academic	**Credit ½**	**11, 12**
Course Name	**Semesters 1 or 2**	**Grade Level**

Course Description: Peer Tutoring Academic is a class for junior and senior students who would enjoy working as an assistant mentor in a classroom with students enrolled. Academic peer tutors would work closely with the classroom teacher to make sure he/she understands expectations. Academic peer tutors would work with struggling students on an individual or small group basis. It is imperative that peer tutors are present on a daily basis because students and teachers rely on you. (Peer Tutors will not perform teacher aide duties or work on personal homework.)

Prerequisites:

- ❖ Strong Attendance History

Applies toward graduation requirements of: 7 Elective credits

Young Families	**Credit 1**	**9, 10, 11, 12**
Course Name	**Semesters 1 & 2**	**Grade Level**

Course Description: A program designed to meet the needs of pregnant and parenting students. Pregnant students receive a complete prenatal and childbirth education curriculum along with looking at the options of adoption and parenting. Parents have a quality day-care in which to learn hands-on parenting skills and to leave their infants while attending required classes at their home school.
Students receive 1/2 credit per hour and attend 2 hours per day for a maximum total of four semesters. (No more than 2 credits).

Prerequisite Courses: None

Applies toward graduation requirements of: 7 Elective credits

Workplace Experience Internship	Credit ½ - 1 ½	12
Course Name	**Semesters 1 or 2**	**Grade Level**

Course Description: Billings Public Schools students have the opportunity to participate in a Workplace Experience Internship which enables them to leave campus and apply their skills in a professional industry setting in a field related to their career pathway of interest. Learning outcomes and goals are set cooperatively by the student, partnering business, teacher coordinator, and career coach. Interns are required to complete a minimum of 90 hours per 0.5 credit per semester with the majority of that time in the workplace. Internships may include classroom activities with the teacher coordinator, involving further study of the field or discussion regarding experiences that students encounter in the workplace. Interns are supported throughout the program by their career coach and teacher coordinator and are graded on hours worked, reflections, assignments if applicable, and evaluations by their employer supervisors. Students earn elective course credit for their experience, as well as gain valuable work experience to add to their resumes. Interns may be paid but are typically unpaid.

Coordination of this course will be handled by the school's respective career coach with support from assistant principal and counselor.

Prerequisite Qualifications: Students must be in the 12th grade, in good standing and on track to graduate, and should have successfully completed prior course work in the career pathway of interest.

The teacher coordinator must meet the licensure requirements in the career pathway that the student is requesting credit.

The partnering business, whether offering a paid or unpaid opportunity, must be willing to submit background checks for themselves and any related employee or have their own background check process in place that meets the district's threshold for acceptance.

Students may request a Workplace Experience Internship within any career pathway. Please contact the school's respective career coach for further prerequisites for these internship opportunities. Workplace Experience Internships are offered for a grade of Pass/Fail and do not affect a student's Grade Point Average (GPA) or class rank.

Applies toward graduation requirements of: 7 Elective credits

Leadership	Credit ½	9, 10, 11, 12
Course Name	**Semesters 1 & 2**	**Grade Level**

Course Description: Leadership courses are designed to strengthen students' personal and group leadership skills. Typically intended for students involved in extracurricular activities (especially as officers of organizations or student governing bodies), these courses may cover such topics as public speaking, effective communication, human relations, parliamentary law and procedures, organization and management, and group dynamics.

The leadership course offerings in each high school may take a generalized approach or a specific departmental focus for the duration of the course (i.e. Local Government-Civics, Community Service Events, Career CTSOs, etc.). For more information and possible course approaches, please refer to your school's offerings.

Prerequisite Courses: None
Applies toward graduation requirements of: 7 Elective credits

Student Council - Leadership and Civics	Credit ½	12
Course Name	**Semesters 1 & 2**	**Grade Level**

Course Description: This course is designed to enhance students' leadership skills in the following areas: Goal Setting, Organization, Communication, Group Process, Responsible Citizenship, and Business Acumen. There is a built-in system of accountability which comes from planning, implementing, and leading regular Council events such as, but not limited to: bi-monthly meetings, community service opportunities, assemblies, clean-ups, social media postings, public relations interviews, merchandize sales, book/record keeping, etc… The ultimate goal of this course is to prepare students to become civic minded citizens and leaders.

Prerequisite Courses: Elected by peers as a Student Body Officer

Course objectives include, but are not limited to:

- **Goal Setting**
- **Organization/Time Management**
- **Communication/Skills**
- **Group Processes**
- **Responsible Citizenship**
    - Does demonstrate ethical behavior and acts with integrity, providing a model for others of personal responsibility and ethical behavior.
    - Does display a positive attitude toward the beliefs and ideas of others and an appreciation of the work of others.
    - Does identify the needs of others, respond to those needs, and experience the benefits of serving others.
    - **Business Acumen**
    - ↙Can identify the target population and then incorporate merchandising techniques, pricing strategies, and produce display along with various advertising techniques.
    - Can understand the elements of budgeting and the procedure for purchases and expenditures with student funds.
    - Can understand chain of command and resolve problems within the scope of their authority, employing positive communication skills.
    - Can understand and apply rules and regulations affecting student organizations, as well as contract and bidding.

Applies toward graduation requirements of: 7 Elective credits

Civic Engagement and Community Service	Credit ½	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Overview: This course aims to inspire students to see themselves as change-makers who can positively impact their communities while fostering the habits of lifelong civic engagement and service. Through hands-on projects, reflective activities, and leadership development, students will explore the relationship between civic responsibility and community service. By examining current societal needs and opportunities for action, students will cultivate essential skills such as leadership, critical thinking, empathy, and collaboration. This course emphasizes the importance of civic duty and the impact of individual actions in shaping the community's well-being.

The Civic Engagement and Community Service course is designed to empower students to become active, informed, and engaged members of their communities by developing, presenting and implementing an Action Impact Project (AIP) that focuses on possible activities such as:

- **Direct Community Service:** Volunteering at local food banks, tutoring students, supporting homeless shelters, and assisting with environmental conservation projects.
- **Civic Action Projects:** Designing and leading initiatives such as blood drives, park cleanups, and donation drives for relief efforts.
- **Public Policy Advocacy:** Collaborating with local government or non-profit organizations to address community needs.

Students will develop and present plans for community service initiatives, outlining goals, resources, and expected outcomes. They will reflect on their community service experiences, analyzing the impact of their work on the community and their personal growth. Students will document their service hours, detailing the type of work, challenges faced, and skills gained.

Connections to College and Career Readiness:
Participation in civic engagement and community service can strengthen college applications and prepare students for careers in public administration, social work, education, environmental science, and nonprofit leadership. Colleges and employers value applicants with demonstrated leadership, initiative, and a commitment to community betterment.

Course Prerequisites: None. Students must be willing to do work outside of the normal school day in order to complete their Action Impact Projects.

Applies toward graduation requirements of: 7 Elective credits

AP Capstone Program - Skyview & West Only

AP Capstone™ is an innovative diploma program from College Board that equips students with the independent research, collaborative teamwork, and communication skills that are increasingly valued by colleges. AP Capstone is built on the foundation of two AP courses - AP Seminar and AP Research – and is designed to complement and enhance the in-depth, discipline-specific study experienced in other AP courses.

Students who earn scores of 3 or higher in AP Seminar and AP Research and on four additional AP Exams of their choosing will receive the AP Capstone Diploma™. Students who earn scores of 3 or higher in AP Seminar and AP Research but not on four additional AP Exams will receive the AP Seminar and Research Certificate™.

AP Seminar/English 2	**Credit 1**	**10**
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: AP Seminar/English 2 is an Honors English course for 10th graders that fulfills the English requirement and serves as the first step in the AP Capstone Diploma program. In this course, students analyze various texts, synthesize information from multiple sources, examine topics from different perspectives, and develop and defend arguments. They complete Honors-level assignments with a strong focus on critical thinking, reading, and writing.

AP Seminar allows students to explore their passions, potentially earn college credit, and prepare for future AP courses. It is a prerequisite for AP Research and part of the globally recognized AP Capstone Program.

Prerequisite Course: Grade 9 English

Applies toward Graduation Requirements of: 4 English credits

AP Research - Skyview & West only	**Credit 1**	**11**
Course Name	**Semesters 1 & 2**	**Grade Level**

Course Description: AP Research, the second course in the AP Capstone experience, allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan, and implement a yearlong investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of 4,000-5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense.

Prerequisite Course: AP Seminar is a prerequisite for AP Research. Completing AP Seminar and all its required assessment components is necessary for students to develop the skills to be successful in AP Research.

Applies toward Graduation Requirements of: 7 Elective credits

Jobs for Montana's Graduates	Credit ½ (each semester)	11, 12
Course Name	**Semester 1 and/or 2**	**Grade Level**

Course Description: The Jobs for Montana's Graduates (JMG) program assists Montana high school students in preparing for life after high school by giving students practical experience with: 21st Century Work/Survival Skills, Entrepreneurship, and Career and Life Exploration. The course is for 11th and 12th grade students who are interested in successfully transitioning from school to work/military or with continuing their education. It also assists struggling students by helping them stay in school and graduate. Ideally, students will come out of the class with some ideas for what they want their life to look like and what career or education they would like to pursue after graduation.

Essential Requirements:

- Employability Skills Curriculum - Career Development, Job Attainment (getting a job), Job Survival (keeping a job), Basic Competencies (including math, reading, writing), Leadership, Self-Development, and Personal Skills.
- Entrepreneurial Skills Curriculum - EMPOWERED curriculum teaches students about economic thinking and gives basic skills required to pursue business ideas. Students experience a market economy in the classroom while participating in activities that allow students to learn while doing. Curriculum culminates in students participating in a Market Day where students have an opportunity to run their own business.
- Montana Career Association - a motivational student organization which fosters the development of leadership, decision-making, assertiveness skills, provides recognition for achievement, and builds self-esteem.
- Job Development and Placement - Job Shadowing experiences that help build critical work skills for future success.
- Post Graduation follow-up - graduates commit to following-up with the JMG teacher for 9 months post graduation.
- Active and productive partnership between business and education.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

***This course applies to the Financial Literacy Credit for graduation.**

Student Council	Credit ½	11, 12
Course Name	**Semester 1 and/or 2**	**Grade Level**

Course Description: The Student Council is a leadership organization that represents the student body, organizes events, and collaborates with school staff to promote a positive school environment. Students will develop leadership, communication, teamwork, and organizational skills while planning and executing school initiatives.

Essential Requirements:

- Demonstrate leadership skills in group settings
- Plan and execute school events (announcement, dances, spirit weeks, etc.).
- Advocate for the student body's needs and concerns.
- Collaborate with peers and staff effectively.
- Manage basic budgeting and fundraising efforts.
- Practice public speaking and presentation skills.
- Help with Career Center Branding
- Must have a strong work ethic and be able to work in an ever-changing environment.

ONE HOUR CLASS

Prerequisite Courses: None

Applies toward graduation requirements of: 7 Elective credits.

Algebra 1 Business Algebra	Credits 2 1 Math - 1 Career Technical Education	9, 10
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: Algebra 1 courses include the study of properties and operations of the real number system; evaluating rational algebraic expressions; solving and graphing first degree equations and inequalities; translating word problems into equations; operations with and factoring of polynomials; and solving simple quadratic equations.

Geared for students with an interest in marketing, sales, or small business operation, marketing career exploration courses expose students to the opportunities available in retail, wholesale, advertising, and other occupational fields using marketing principles.

Business Algebra would enable students a hands-on Algebra course which would enable them to grasp Algebra concepts through the frame of business. This is a partner course to the Career Center's Geometry in Construction which has been very successful in enabling students who otherwise struggle with conceptualizing math, an avenue to view concepts in a more concrete way.

This class can be utilized not only here at the Career Center but in the home high schools as well. Additionally, this class may qualify for students needing to complete financial literacy requirements.

TWO HOUR BLOCK

Prerequisite Courses: PreAlgebra

Applies toward graduation requirements of: 2 Math credits and 1 Career Technical Education credit

***This course applies to the Financial Literacy credit for graduation.**

Principles of the Biomedical Sciences	Credit 1	9, 10, 11, 12
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: Principles of Biomedical Science (PBS) is a rigorous, fast-paced full-year course intended to provide a basic foundation for students who are potentially interested in a career in medicine, healthcare, and even animal science. This course will help students gain knowledge and skills in biology, anatomy & physiology, genetics, microbiology, and epidemiology, and it will encourage students to apply what they learn to real-world medical and healthcare situations. Through individual and collaborative team activities, projects, and case studies, students will take on roles of various biomedical professionals to tackle challenges these workers commonly face. Students will learn how to operate tools that hospital and lab employees use, and they will gain relevant hands-on experiences. Students will be challenged to apply common forensic science methods to investigate the health history and eventual death of a fictitious person. They will diagnose and propose treatments to fictitious patients, track down and contain a medical outbreak at a fictitious hospital, learn how to stabilize a patient during an emergency, and collaborate with others to design solutions to local and global medical problems.

Students should be prepared for nightly homework as well as quizzes, tests, and technical writing assignments.

Because the course curriculum is only available online, it is essential that students have reliable and consistent access to a home computer as well as internet access.

The entirety of this course must be successfully completed in order to take the subsequent courses, “Human Body Systems” followed by “Medical Interventions”. This class is also a suggested prerequisite for other health science courses offered at the Career Center. PBS is aligned with educational standards of the NGSS, Common Core, and National Consortium for Health Science Education.

- This class is available to grades 9 - 12; 1 credit, year-long course; CTE credit (not a science credit).

Essential Requirements:
- An ability to work well in small groups with peers.
- An ability to work independently and be self-motivated, including appropriate use of time provided in class, as well as managing time and workflow outside of school hours to complete assigned tasks in the time allotted.
- An ability to follow lab safety protocols
- An ability to perform basic computer skills.

In the event of over enrollment, **first criteria** for consideration shall be prior year’s daily attendance, followed by performance in prior science, math, and English courses.

ONE HOUR CLASS

Prerequisites Courses:
- **It is highly encouraged that a student has already successfully completed or be concurrently enrolled in biology.**
- It is highly encouraged that a student earned a “C” or better in their current and previous year of grade-level science class.
- It is highly encouraged that a student earned a “C” or better in their current and previous year of grade-level math class.
- It is highly encouraged that a student earned a “C” or better in their current and previous year of grade-level English class.

Other important info:
- **Attendance is extremely important as many hands-on activities and labs can only be completed in class. If absent, students must make them up before school, during lunch, or after school.**
- Students will work independently as well as in small groups.
- Students will oftentimes present orally to small groups and the entire class.

Applies toward graduation requirement of: 1 Career Technical Education Credit
- Concurrent enrollment in PBS and HBS is only allowed with the course instructor/administrator approval.
- Attendance is very important to a student’s success in this course.
- If the student does not have a computer, the student must make arrangements to check out a school computer.

Human Body Systems	Credit 1 4 Credits @ City College MSU Billings	10, 11, 12
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: This course provides students with a college-level basic understanding of human anatomy and physiology. Introductory concepts include: anatomical and directional terminology; body planes, regions, and their contents; biochemistry and biological macromolecules; feedback and homeostasis; cell structure and function; and histology. Students will then apply this knowledge to dive deeper into the basic structure, function, and interactions of the integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems. The lab portion of this course helps students apply the knowledge base of structure and function of the human body organs and systems. Labs and hands-on activities include: histology, building the systems on the Student 2® Anatomy in Clay model, dissection of a variety of specimens, and use a variety of classroom models. Students should be dedicated to this course by completing all assignments, labs, hands-on activities, and studying/reviewing nightly on their own.

Dual Credit Option: High school students have the opportunity to earn both high school and college credit through City College MSU-B by enrolling in BIOH 104/BIOH 105: Basic Human Biology and Basic Human Biology Lab.

ONE HOUR CLASS

Essential Requirements:

- Demonstrate competent to proficient math (including algebra, and graphing and analyzing data), writing, and reading skills.
- Demonstrate an ability to follow written and verbal instructions.
- Demonstrate an ability to work well in small groups with peers.
- Demonstrate an ability to work independently and be self-motivated, including appropriate use of time provided in class, as well as managing time and workflow outside of school hours to study and complete assigned tasks in the time allotted.
- Demonstrate an ability to follow lab safety protocols.
- Demonstrate an ability to perform basic computer skills.
- NOTE: Attendance is required and documents.
- It is essential that students have reliable and consistent access to a home computer and internet access. If the students does not have a home computer, one can be checked out to them by the Career Center or their home high school.

In the event of over enrollment, first criteria for consideration shall be current daily attendance followed by performance in prior science and/or biomedical science courses.

Prerequisite Courses:

- **Successful completion of grade-level appropriate Math classes.**
- **Successful completion of all previous years of English classes.**
- **Successful completion of biology and all previous science classes with grade 'C' or better.**
- **Successful completion of Principles of Biomedical Sciences (PBS) or Human Anatomy or instructor/administrator approval.**

Applies toward graduation requirements of: 1 Career Technical Education Credit

Medical Interventions	**Credit 1**	**11, 12**
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: Students investigate a variety of interventions involved in the prevention, diagnosis, and treatment of disease as they follow the lives of a fictitious family**.** Students explore how to 1) prevent and fight infection; 2) screen and evaluate the code in human DNA; 3) prevent, diagnose, and treat cancer; and 4) prevail when the organs of the body begin to fail**.** These scenarios expose students to the wide range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics and therapeutics. Class activities are heavily weighted in laboratory medicine techniques. Each family case scenario introduces multiple types of interventions and reinforces concepts learned in the previous two PLTW biomedical courses, as well as presenting new content, ranging from simple diagnostic tests to treatment of complex diseases and disorders providing a look at the past, present, and future of biomedical sciences. Lifestyle choices and preventive measures are emphasized throughout the course, as are the important roles scientific thinking and engineering design play in the development of interventions of the future. Students are also engaged in considering and debating the bioethics of applying new scientific knowledge and capabilities and related health policy, such as in genetic engineering.

Students should be taking or plan to take higher level math and science for four years of high school. Students should be in the top ⅓ of their class. Students should be interested in pursuing a degree in science, math, or technology -- i.e., in research, laboratory medicine, or clinical medicine. Other important traits are: self-motivation, strong work ethic, good time management, interest in medicine, and enjoyment in finding creative solutions to problems.

Essential Requirements:

- Demonstrate competent to proficient math skills (including algebra, and graphing and analyzing data), writing, and reading skills.
- Demonstrate an ability to follow written and verbal instructions.
- Demonstrate an ability to work well in small groups with peers.
- Demonstrate an ability to work independently and be self-motivated, including appropriate use of time provided in class, as well as managing time and workflow outside of school hours to complete assigned tasks in the time allotted.
- Demonstrate an ability to follow lab safety protocols.
- Demonstrate an ability to perform basic computer skills.
- **NOTE: Attendance is required and documented.**

Strongly recommend access to internet and computer outside of class.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance, followed by performance in prior biomedical science courses.

ONE HOUR CLASS

Prerequisite Courses:

- Successful completion of PBS and HBS with a “C” or better both semesters of both classes or instructor/administrator approval.
- Successful completion of biology.
- Successful completion of grade-level appropriate math class.
- Successful completion of all previous years of English class.

Applies toward graduation requirements of: 1 Career Technical Education credit

- ❖ Concurrent enrollment in HBS and MI (if PBS was successfully completed with a “C” or better both semesters) is only allowed with instructor/administrator approval.
- ❖ Attendance is very important to a student’s success in this course.
- ❖ Strongly recommended that students have a home computer and internet access.
- ❖ If the student does not have a computer, the instructor will make arrangements for student to be successful without having a computer available at home.

College Basic Human Biology	Credit 1 4 Credits @ City College MSU Billings	10, 11, 12
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: Provides students with a basic understanding of human anatomy and physiology. Concepts of the body plan and homeostasis will be introduced. Students will also learn the basic structure, function, and interaction of the integumentary, skeletal, muscular, nervous, endocrine, blood, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems. The lab portion of the course helps students apply the knowledge base of structure and function of the human body organs and systems. This course is a dual credit course and with successful completion, four (4) college credits will be awarded at City College-MSU Billings. This course is the equivalent of BIOH 104 Basic Human Biology (3 credits) and BIOH 105 Basic Human Biology Lab (1 credit) at City College MSU Billings. As such, students should anticipate and prepare for a rigorous pace of new concepts and medical terminology, with regular assessment processes through both semesters.

This course is embedded within Human Body Systems, the full-year course students must enroll in to receive college credit.

Essential Requirements:

- Demonstrate competent to proficient math (including algebra, and graphing and analyzing data), writing, and reading skills.
- Demonstrate an ability to follow written and verbal instructions.
- Demonstrate an ability to work well in small groups with peers.
- Demonstrate an ability to work independently and be self-motivated, including appropriate use of time provided in class, as well as managing time and workflow outside of school hours to study and complete assigned tasks in the time allotted.
- Demonstrate an ability to follow lab safety protocols.
- Demonstrate an ability to perform basic computer skills.
- **NOTE: Attendance is required and documented.**
- Reliable and consistent access to a home computer and internet access. If the student does not have a home computer, one can be checked out to them by the Career Center or their home high school.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance followed by performance in prior science and/or biomedical science courses.

ONE HOUR CLASS

Prerequisite Courses:

- Successful completion of grade-level appropriate Math classes.
- Successful completion of all previous years of English classes.
- Successful completion of prior science classes with grade of ‘C’ or better.
- Successful completion of Principles of Biomedical Sciences (PBS) or Human Anatomy or instructor/administrator approval.

Applies toward graduation requirement of: 1 Career Technical Education credit

College Medical Terminology	Credit ½ 3 Credits @ City College MSU Billings	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This one-semester course introduces the student to the specialized language of the medical profession and builds a background vocabulary in this area using a word-building system which provides a solid foundation for understanding medical terms. Basic word-building concepts are taught with emphasis on spelling, pronunciation, and definitions.

This course is a dual credit course and with successful completion of the semester, 3 college credits will be awarded at City College MSU Billings. As such, students should anticipate and prepare for a rigorous pace of new word parts and concepts, with regular assessment processes throughout the semester. This course is the equivalent of AHMS 144 Medical Terminology (3 credits) at City College MSU Billings.

Essential Requirements:

- Demonstrate proficient writing and reading skills.
- Demonstrate an ability to follow written and verbal instructions.
- Demonstrate an ability to work independently and be self-motivated, including appropriate use of time provided in class, as well as managing time and workflow outside of school hours to study and complete assigned tasks in the time allotted.

ONE HOUR CLASS

Prerequisite Courses:

- Successful completion of all previous years of English classes.
- Successful completion of grade-level appropriate Math classes.
- Successful completion of prior science and language classes with grade of ‘B’ or better highly recommended.

Applies toward graduation requirement of: 1 Career Technical Education credit

*Attendance is necessary for student success.
*Strongly recommended that students have a home computer and internet access.
*If the student does not have a computer, the instructor will make arrangements for the student to check out a computer for home use.

Certified Nurse Assistant	**Credit ½**	**11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Concepts and practices in basic skills for Nursing Assistants. Course includes basic medical terminology, basic human anatomy and physiology, and the aging process. Students will gain understanding and application of the skills required to address the needs of the chronically ill residents. This course will prepare students for state examinations required for a Certified Nursing Assistant Certificate. This course will include both classroom hours and practical application.

Course Topics

- Role and responsibility of the nurse aide in long term care
- Basic rights and needs
- Communication
- Resident's physical environment
- Personal care of the resident
- Resident safety and body mechanics
- Death and dying
- Nutrition and fluid balance
- Prevention and control of infection
- Personality and behavior
- Basic anatomy and physiology
- Meeting the needs of special residents
- Emergency care
- Effects of aging on the human body
- Common disease processes
- Measuring vital signs, intake and output, height and weights

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

*Students will have to provide their own transportation for training opportunities and requirements off campus.

Prerequisite Courses:

- Successful completion of Biology 1

Applies toward graduation requirements of: 1 Career Technical Education credit

Course Name	Semester 1 or 2	Grade Level
Anatomy & Physiology **Applied Medicine (Med. Careers)**	**Credit 1** **½ Biology and** **½ Career Technical Education** **3 Credits @ Highlands College**	**12**

Course Description: Medical Careers gives seniors an inside look at the world of medicine through hands-on learning, real-world experiences, and professional certifications. Students dive into anatomy and physiology, explore a variety of healthcare career pathways, and gain valuable experience through clinical rotations at three local medical facilities. In this immersive course, students step into hospital and clinical settings to observe healthcare professionals in action, learning what it takes to thrive in professional medical environments. Along the way, they'll earn certifications in Basic Life Support (BLS), First Aid, and Stop the Bleed, building essential skills for both college and career readiness. Med Careers offers a unique opportunity to discover your passion, connect classroom learning with real-life practice, and prepare for the next step in your healthcare journey. Strong attendance and active participation are key to making the most of this exciting experience.

Dual Credit Option: High school students have the opportunity to earn both high school and college credit through Highlands College by enrolling in HTH 101: Opportunities in the Health Professions.

Essential Requirements:

- Strict adherence to HIPAA based confidentiality
- Adherence to hospital professional dress code
- Practice universal precautions
- Attendance to hospital rotations is mandatory
- Students must provide own transportation to hospital orientations and rotations
- Students must follow all hospital protocols and policies.
- Strict adherence to professionalism.

TWO HOUR BLOCK

Prerequisite Courses: Completion of 3 science credits. Must provide your own transportation.
*Students may take this course concurrently with College Emergency Medical Technician.

Applies toward graduation requirements of: 1 Biology or 7 Elective credits and
1 Career Technical Education credit

College Emergency Medical Technician	**Credit 1 6 Credits @ City College MSU Billings**	**12**
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: This course will prepare students for the state and national examinations required for Emergency Medical Technician certification, and will include both classroom hours and practical application. The course is designed for students desiring to perform emergency medical care. Students will learn to assess the seriousness of a patient's condition and the appropriate emergency medical techniques to stabilize the patient until hospital medical care can be received. The course covers theory and techniques; operational aspects of prehospital care; and the scope, responsibility, and safety of the EMT professional. Students who successfully complete this full-year course will receive 6 college credits for ECP 291 Emergency Medical Technician at City College MSU Billings.

Essential Requirements for EMT Certification and College Credit:

- Students may not have more than 10 total absences throughout the course of the academic year (some make-up opportunities exist within limits).
- Students must maintain a 75% minimum grade on all tests and quizzes
- Successful completion of the course requires a minimum of 10 hours of patient observation with an approved clinical supervisor
- BLS certification
- Strict adherence to HIPAA based confidentiality

Students must be on track with essential requirements for EMT certification and college credit to matriculate from semester one to semester two. Rare exceptions will be considered on a case-by-case basis.

ONE HOUR CLASS

Prerequisite Courses: Successful completion of Biology 1.

Suggested Prerequisite Courses: Principles of Biomedical Sciences, Human Body Systems, Medical Interventions, Medical Careers (Anatomy & Physiology & Applied Medicine) Human Anatomy & Physiology
*Students may take this course concurrently with Medical Careers.

Applies toward graduation requirements of: 1 Career Technical Education credit

Introduction to the Operating Room	Credit ½	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This one-semester CTE course begins with learning/reviewing basic human anatomy and physiology, as well as anatomical and medical terminology to prepare students for the OR dialogue. This will be accomplished through both written assignments and hands-on activities and possibly dissections (if time permits). History of surgery, the operating room environment as a micro-system within the context of the larger hospital system and organization, HIPAA and relevant standards of conduct, communication, teamwork, and safety standards will be discussed. Students will learn about the education, daily duties/responsibilities, and inner workings of the medical careers in the Operating Department from pre-, intra-, and post-operative care, including, but not limited to: nurses, CNAs, patient care techs, anesthesiologists, certified nurse anesthetists, anesthesia technicians, perfusionists, surgical technicians, surgical tech assistants, physician assistants, certified nurse practitioners, radiology technicians, biomedical engineers, and a variety of surgical specialties.

Students will learn and be assessed on common OR skills, including, but not limited to: surgical hand scrubbing, proper procedures to set up a Mayo stand to prepare for then donning and doffing sterile surgical gown and gloves, transferring a patient from a stretcher to an OR table, identifying and understanding the use of surgical equipment and common surgical instruments, sterilization processes of surgical instruments, content of surgical packs and trays, how to maintain the sterile field in the OR, basic suture techniques, setting up the back table, and what is involved in/how to carry out a proper surgical count. The comprehensive final project will include researching an assigned common surgical procedure and presenting to classmates and possible invited adult guests. If our schedule allows, guest speakers might include medical healthcare providers and if time and circumstances permit, there may be one or more field trips to medical facilities. Students will complete assignments by watching provided videos, reviewing PowerPoints, reading the entirety of the class book, and completing individual partner/small group projects. Students should expect frequent homework, and both written and practical hands-on testing.

This class is not for the queasy. Human anatomy and physiology will be discussed and surgical photographs and videos will be viewed and are a requirement in order to teach this course and for a student to take it.

Essential Requirements:

- Demonstrate an ability to follow written and verbal instructions.
- Demonstrate an ability to work well in small groups with peers.
- Demonstrate an ability to work independently and be self-motivated, including appropriate use of time provided in class, as well as managing time and workflow outside of school hours to complete assigned tasks in the time allotted.
- Demonstrate an ability to follow lab and OR safety protocols.
- Demonstrate an ability to perform basic computer skills.
- **Successful completion of one or more of the following is recommended** as familiarity with anatomy and physiology is helpful for studying surgical care and the surgical specialties.
    - Principles of Biomedical Science
    - Human Body Systems
    - Human Biology
    - Anatomy & Physiology
- **NOTE: Attendance is required and documented.**

In the event of over-enrollment, first criteria for consideration shall be current daily attendance followed by performance in prior science and/or biomedical science courses.

ONE HOUR CLASS

Prerequisite Courses:

- Successful completion of grade-level appropriate Math classes.
- Successful completion of all previous years of English classes.
- Successful completion of prior science classes with grade of 'C' or better.

Applies toward graduation requirements of: 1 Career Technical Education Credit

- ❖ Attendance is very important to a student's success in this course.
- ❖ It is strongly recommended that students have a home computer and internet access. If the student does not have a computer, they can check out one for the semester at the Career Center or with their homeschool.

College Math For Healthcare	Credit 1/2 3 Credits @ City College MSU Billings	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Provides students with a solid mathematical foundation necessary to succeed in a healthcare profession. This course will review algebra, systems of measurement, ratio and proportions, basic probability and statistics concepts, and ionic solutions and pH calculations. This course will apply mathematical reasoning and problem solving as it applies to the healthcare field. The main goal of College Math for Healthcare is to develop critical thinking and problem-solving skills that will enable students to quantitatively analyze and solve problems drawn from the field of healthcare. Students who successfully complete this course will earn 3 college credits for M 140 College Math for Healthcare through City College MSU Billings.

Upon successful completion of the course, students should be able to:

- Apply knowledge of decimals, fractions, and percents to solve algebraic linear equations in the healthcare field.
- Understand rational equations and use knowledge of rational equations to solve problems involving ratios and proportions including but not limited to volume, mass, weight, and temperature.
- Be able to use the fundamental units of the metric system (SI), household units, and the apothecary system in making measurements and doing calculations related to allied health applications.
- Interpret the meaning of range, standard deviation, and the coefficient of variation in applied situations.
- Use and apply the basic probability concepts: probability models (Venn diagrams, two-way tables), sample spaces with equally likely outcomes (counting), probability distributions.
- Use and apply the rudiments of statistics: measures of center and spread, the normal distribution.
- Understand and interpret exponential and logarithmic functions and graphs.
- Apply knowledge of logarithmic functions to solve problems in healthcare.
- Apply mathematical and statistical reasoning to a variety of applied or theoretical healthcare problems.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Course: Completion of Algebra 2 with a C or better and a GPA of 2.5 or higher or a qualifying test score of 22+ on the ACT Math or a qualifying test score on the EdReady assessment.

Applies toward graduation requirements of: 2 Math credits of 7 Elective credits.

Urban Agriculture	**Credit 1 (each semester)**	**11, 12**
Course Name	**Semester 1 and/or 2**	**Grade Level**

Course Description: Urban Agriculture is a capstone course designed to culminate students' experiences in horticulture and botanical sciences. Projects and problems are based on practical applications and designed to develop and improve employability skills of students. Students will further enhance research, critical thinking, and teamwork skills as they expand on content knowledge from previous agriculture courses.

Students will understand specific connections between the course and Supervised Agricultural Experience and FFA components of agricultural education programs. Students will improve investigative, experimental, and communication skills. As a result of the course, students will develop skills in scientific communications about problems, research, and solutions. The knowledge and skills students develop will be valuable for college and career aspirations.

Essential Requirements:

- The Agricultural Industry
- Floral Design
- Landscape Design
- Landscape Construction
- Agricultural Business
- Techniques of Growing Plants

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented. Enrollment priority will be given to students who have successfully completed AFNR, Principles of Plant Science, or Animal Science.

TWO HOUR BLOCK

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

Introduction to Agriculture, Food, & Natural Resources (AFNR)	Credit 1	9,10, 11, 12
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: *Introduction to Agriculture, Food, and Natural Resources (AFNR)* introduces students to agricultural opportunities and the pathways of study in agriculture. Science, mathematics, reading, and writing components are woven in the context of agriculture and students will use the introductory skills and knowledge developed in this course throughout the CASE curriculum. Throughout the course are activities to develop and improve employability skills of students through practical applications. Students explore career and post-secondary opportunities in each area of the course.

Students participating in the *Introduction to Agriculture, Food, and Natural Resources* course experience hands-on activities, projects, and problems. Student experiences involve the study of communication, the science of agriculture, plants, animals, natural resources, and agricultural mechanics. While surveying the opportunities available in agriculture and natural resources, students learn to solve problems, conduct research, analyze data, work in teams, and take responsibility for their work, actions, and learning. For example, students work in groups to determine the efficiency and environmental impacts of fuel sources in a practical learning exercise.

The *Introduction to Agriculture, Food, and Natural Resources* course serves as the introductory course within the CASE Program of Study. The course is structured to enable all students to experience an overview of the fields of agricultural science and natural resources so that students may continue through a sequence of courses through high school. The knowledge and skills students develop will be used in future courses within the CASE program.

In addition, students will understand specific connections between their lessons and Supervised Agricultural Experience and FFA components that are important for the development of an informed agricultural education student. Students investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community.

Essential Requirements: The introduction to Agriculture, Food, and Natural Resources course includes:

- Agricultural Education - Agriculture, FFA, and SAE
- Communication Methods
- Science Processes
- Natural Resources
- Plants and Animals
- Agricultural Power and Technology

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: None

Recommended:

- Successful completion of grade level appropriate science class
- Successful completion of grade-level appropriate math class
- Successful completion of all previous years of English class

Applies toward graduation requirements of: 1 Career Technical Education credit

Principles of Plant Science	Credit 1	10, 11, 12
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: Principles of Plant Science is a foundation-level course teaching students the form and function of plant systems. Student experiences include the study of plant anatomy and physiology, classification, and the fundamentals of production and harvesting.

Students learn how to apply scientific knowledge and skills to use plants effectively for agricultural and horticultural production. Students discover the value of plant production and its impact on the individual, the local, and the global economy.

Students will work on major projects and problems similar to those that plant science specialists, such as horticulturalists, agronomists, greenhouse and nursery managers, and plant research specialists, face in their respective careers. Students will understand specific connections between the course's lesson and Supervised Agricultural Experience and FFA components of agricultural education programs. Students will improve investigative, experimental and communication skills.

In addition, students will understand specific connections between plant science lessons and Supervised Agricultural Experience and FFA components that are important for the development of an informed agricultural education student. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community.

Essential Requirements: Principles of Plant Science

- Soils
- Hydroponics
- Anatomy and Physiology
- Taxonomy
- Growing Environment
- Reproduction
- Pest and Disease Management
- Crop Production and Marketing

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: 10th graders must have successful completion of Intro to Ag, Food and Natural Resources (AFNR), with passing grades and earning credit both semesters or instructor/administrator approval. No prerequisite courses required for 11th or 12th grade students.
Note: Enrollment priority will be given to students who have successfully completed; AFNR or Principles of Animal Science.

Recommended:

- Successful completion of grade-level appropriate science class.
- Successful completion of grade-level appropriate math class.
- Successful completion of all previous years of English class.

Applies toward graduation requirements of: 1 Career Technical Education credit

Principles of Animal Science	Credit 1	10, 11, 12
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: Principles of Animal Science is a foundation-level course engaging students in hands-on laboratories and activities to explore the world of animal agriculture. During the course, students develop a comprehensive Producer's Management Guide for an animal of their choice. Student experiences involve the study of animal anatomy, physiology, behavior, nutrition, reproduction, health, selection, and marketing. Throughout the course, students consider perceptions and preferences of individuals within local, regional, and world markets.

Students investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community. Students will explore hands-on projects and activities to learn the characteristics of animal science and work on major projects and problems similar to those that animal science specialists, such as veterinarians, zoologists, livestock producers, and industry personnel, face in their respective careers.

In addition, students will understand specific connections between animal science lessons and Supervised Agricultural Experience and FFA components that are important for the development of an informed agricultural education student. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions to their peers and members of the professional community.

Essential Requirements: Principles of Animal Science

- **History and Use of Animals**
- **Animal Handling and Safety**
- **Cells and Tissues**
- **Animal Nutrition**
- **Animal Reproduction**
- **Genetics**
- **Animal Health**
- **Animal Products, Selection, and Marketing**

In the event of over enrollment, <u>first criteria</u> for consideration shall be current daily attendance. Attendance is required and documented.

<u>ONE HOUR CLASS</u>

Prerequisite Courses: 10th graders must have successful completion of Intro to Ag, Food and Natural Resources (AFNR), with passing grades and earning credit both semesters or instructor/administrator approval. No prerequisites for 11th or 12th grade students.
Note: Enrollment priority will be given to students who have successfully completed; AFNR or Principles of Plant Science.

Recommended:
- Successful completion of grade-level appropriate science class.
- Successful completion of grade-level appropriate math class.
- Successful completion of all previous years of English class.

Applies toward graduation requirements of: 1 Career Technical Education credit

Veterinary Science	Credit 1	11, 12
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: Veterinary Science is a continuation of the Fundamentals of Animal Science Course. Students will expand upon their studies related to the care and management of companion and production animals by delving deeper into the behavior and internal body systems of the normal animal, while also applying animal handling and management procedures, in addition to professional communication and record keeping practices. Students will apply examination, treatment, and surgical procedures, to investigate and detect infectious and non-infectious diseases and to propose disease management plans in accordance with veterinary medicine regulations. Working with live animals is a component of this course and students will have to sign a waiver and complete a safety exam to participate in laboratory and clinical procedures.

Essential Requirements:

- Knowledge & Comprehension - Review and retell the normal animal (Breeds of companion and domestic livestock, external anatomy, and internal body systems).
- Application - Practice animal management and handling techniques as well as examination, treatment, and surgery procedures.
- Analysis - Investigate, interpret, and detect infectious and non-infectious diseases.
- Synthesis - Plan, produce, and propose disease management plans.
- Evaluation - Choose, recommend, justify, and prioritize veterinary medicine practices and regulations implemented in practice.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: Completion of Principles of Animal Science; Or Principles of the Biomedical Sciences with passing grades earning credit both semesters or instructor/administrator approval.

Recommended:

- Successful completion of grade-level appropriate science class.
- Successful completion of grade-level appropriate math class.
- Successful completion of all previous years of English class.

Applies towards graduation requirements of: 1 Career Technical Education credit

Web Page 1	Credit ½ 3 Credits @ City College MSU Billings	10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Web Page 1 will provide students with the necessary skills to design, create, and maintain functional web pages. The class will cover HTML 5 (Hyper Text Markup Language), CSS3 (Cascading Style Sheets), Adobe Dreamweaver, Adobe Photoshop, and the basic principles of Graphic Design. The class will focus on fundamental methods, standards, and techniques for creating and maintaining basic web pages using HTML5 and CSS3.

Dual Credit Option: High school students have the opportunity to earn both high school and college credit through City College MSU Billings by enrolling in CSCI 181: Web Design and Programming

Other key elements to be taught:

- Use and function of the internet
- Website evaluation based on design and function
- Website structure and effective navigation
- All aspects of design and function are compared to industry standards

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: 10th grade must have successful completion of Exploring Visual Media. No prerequisite courses are required for 11th and 12th grade students.

Applies toward graduation requirements of: 1 Career Technical Education credit

Web Page 2	Credit ½	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course further explores and develops skills in web design and development. This course will focus on working with clients, as each eligible student will work with a client and a real world job environment. An emphasis will be placed on the “full package” design and build from domain name to the final upload. Students will work together for art direction and evaluation to create a quality of design that mirrors the industry.

Other key elements to be taught:

- Skills, such as interview and responding to feedback
- Web design geared towards the client
- Re-design and modification based on client specifications
- Design solutions including web site, domain names, hosting and email

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: Requires a grade of “C” or higher in Web Page 1 or instructor/administrator approval

Applies toward graduation requirements of: 1 Career Technical Education credit

College Introduction to Web Design and Programming	Credit ½ 3 Credits @ City College MSU-Billings	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: College Introduction to Web Design and Programming will provide students with the necessary skills to design, create, and maintain functional web pages. The class will cover HTML 5 (Hyper Text Markup Language), CSS3 (Cascading Style Sheets), Adobe Dreamweaver, Adobe Photoshop and the basic principles of Graphic Design. The class will focus on fundamental methods, standards, and techniques for creating and maintaining basic web pages using HTML5 and CSS3. Students who successfully complete this course will earn 3 college credits for CSCI 181 at City College MSU Billings.

Other key elements to be taught:

- Use and function of the internet
- Website evaluation based on design and function
- Website structure and effective navigation
- All aspects of design and function are compared to industry standards

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

Animation Lab 1	**Credit ½**	**10, 11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This exciting course introduces students to the world of animation, moving from traditional methods and terminology (including anatomy, basic perspective and flipbooks) to cutting-edge techniques using Abode Animate software to create and animate 2-dimensional computer- based graphics. There is a strong emphasis placed on drawing, both character and environment.

Other Key Elements:

- Flash animation designed and developed specifically for the web
- Use of emerging technology
- Creation of storyboards and outlines
- Creative thinking with technology

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: 10th grade students must have successful completion of Exploring Visual Media. No prerequisite courses required for 11th and 12th grade students. Art 1 and basic drawing skills are helpful but not required.

Applies toward graduation requirements of: 1 Career Technical Education credit or 1 Visual/Performing Arts credit

Animation Lab 2	**Credit ½**	**11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course builds on previously learned animation techniques and allows students to take their creativity to the next level in multiple animations. Additionally, students will continue to work on their ability to draw convincing poses, expressions, character designs, thumbnails, and storyboards.

Other Key Elements:

- Advanced techniques in Flash, After Effects, and 3D programs
- Use of emerging technology

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: Requires a grade of “C” or higher in Animation Lab 1

Applies toward graduation requirements of: 1 Career Technical Education credit or 1 Visual/Performing Arts

Graphics

Print Photo (Photography)	**Credit 1**	**11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course introduces and explores the Graphic Art of Photography. It will also provide students with an introduction to visual concepts, basic image capture, and camera functions using digital cameras. Students will learn to shoot, develop, crop, and mount their photographs as well as specific professional camera and editing techniques. Students will also have the opportunity to begin exploring the cutting-edge field of digital photography, using the latest Adobe software available in the industry. This course consists of lecture, textbook assignments as well as darkroom and studio projects. Field trips to local businesses and location shots enhance the hands-on learning experience.

Essential Requirements:
Students will demonstrate the following:

- Pinhole camera construction and usage
- Basic understanding and use of software basics for photographic imaging and digital printing
- Dry mounting and presentation techniques
- Basic camera functions in DSLR

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

TWO HOUR BLOCK

Prerequisites Courses: Preferred Art 1 or an Art Portfolio

Applies toward graduation requirements of: 1 Career Technical Education credit or 1 Visual/Performing Arts

Design Advertising Design Layout	Credit 1	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This challenging, hands-on course explores the art-related field of Graphic Design, and includes illustration, advertising design & layout; computer assisted design, and design theory. During the semester, students are exposed both to traditional and cutting-edge techniques and procedures, and have the opportunity to learn and create in a productive, supportive environment. Additionally, Design students will hear from a variety of professionals working in all aspects of the industry, and will spend time exploring the wide array of graphics related careers available today. Students successfully completing class will be able to step into and perform capably in a number of entry-level jobs in the graphic design industry.

Essential Requirements:

Students successfully completing this class will:

- Demonstrate a solid understanding of both the theory and application of the principles and elements of design.
- Demonstrate basic knowledge of typography and composition.
- Demonstrate basic art techniques.
- Demonstrate basic knowledge regarding the history of Graphic Design, including knowledge of a variety of well-known designers and artists.
- Demonstrate introductory knowledge of Adobe Illustrator, the industry's leading design software.

In the event of over **enrollment, first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

TWO HOUR BLOCK

Prerequisite Courses: 1 credit of Art (2 art classes) preferred

Applies toward graduation requirements of: 1 Career Technical Education credit or 1 Visual/Performing Arts credit

Digital Photo	Credit ½	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course encourages students to further develop the graphic communication and design skills learned in previous classes, and involves practical lessons dealing with image manipulation. Students will enhance their skills in photography, composition, layout & design, and through the use of Adobe Software's industry standard Creative Suite. In this class, there is a major emphasis on not only learning how to use Adobe Photoshop, but also on how to apply that knowledge in building a professional quality portfolio. Occasionally, community design/graphics projects are brought in and completed in-house by the class members.

Students successfully completing this class will be able to step into and perform capably in a number of above entry-level jobs in the Graphic Arts industry.

Essential Requirements:

Students successfully completing this class will:

- Demonstrate knowledge and application of all aspects of Adobe Photoshop/Lightroom through class lessons and self-directed work.
- Demonstrate Photoshop skills through a variety of relevant assignments, including business card and cd cover design, photo retouching, and photo manipulation.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

➢ **It is recommended students who successfully complete this class continue in Design and Layout.**

ONE HOUR CLASS

Prerequisite Courses: Recommended first-year Graphics or several art classes

Applies toward graduation requirements of: 1 Career Technical Education credit or 1 Visual/Performing Arts credit

Digital Illustration	Credit ½	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course encourages students to further develop the graphic communication and design skills learned in previous classes. Students will enhance their skills in composition, layout and design through the use of Adobe Software's industry standard Creative Suite. In this class, there is major emphasis on not only learning *how* to use Adobe Illustrator, but also how to apply that knowledge in building a professional quality portfolio. Occasionally, community design/graphics projects are brought in and completed in-house by class members. Students successfully completing class will be able to step into and perform capably in a number of entry-level jobs in the graphic design industry.

Essential Requirements:

Students successfully completing this class will:

- Demonstrate a solid understanding of both the theory and application of the principles and elements of design.
- Demonstrate basic knowledge of typography and composition.
- Demonstrate basic art techniques.
- Demonstrate basic knowledge regarding the history of Digital Design, including knowledge of a variety of well-known designers and artists.
- Demonstrate knowledge of Adobe Illustrator, the industry's leading design software, including: tool usage, and intermediate skill.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented**.**

➢ **It is recommended that students who successfully complete this class and have also completed**

ONE HOUR CLASS

Prerequisite Courses: Students must earn a "C" or better in Design Advertising/Design Layout

Applies toward graduation requirements of: 1 Career Technical Education credit or 1 Visual/Performing Arts credit

Exploring Visual Media	Credit ½	10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Exploring Visual Media opens the pathway to an exciting world of graphics-related technology and career options.

Interested students will engage in an intensive, semester long tour through the fields of visually-related media.

Additionally, students taking **Exploring Visual Media** will have the opportunity to learn about visually related career options in a variety of ways, including field trips, guest speakers, video presentations, and traditional, pen/paper-based research.

Students leaving the class will be well-equipped to continue their exploration in any of the Career Center's other graphics-based offerings.

Essential Requirements:
Students will explore the following graphics-linked disciplines:

- Graphic Design: Students will learn the basics of graphic design, including composition, color theory, typography and the principles of design. Students will create a variety of work based upon the information they learn.
- Photography: Students will learn the principles of photography and will learn how to build their very own working pinhole cameras. They will develop their own film and print their own pictures before moving on to cutting-edge, digitally based photography.
- Animation: Students will explore the history of animation, as well as the principles behind it. They will create their own paper-based animations and be briefly introduced to the Adobe's "Animate" software.
- Web Design: During this brief introduction to the world of web design, students will learn about the principles necessary to designing an effective webpage, and will take a look at "coding" the most effective way of creating web-based content.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit or 1 Visual/Performing Art credit

AP 2-D Art and Design (Photography)	**Credit 1**	**11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description:
AP 2-D Art and Design in Photography. This course introduces and develops skills that will be used in developing a 2D Art portfolio. It will also provide students with an introduction to visual concepts, basic image capture, and camera functions using digital cameras and studio lighting. Students will learn to shoot, develop, crop and mount their photographs as well as specific professional camera and editing techniques. Students will also have the opportunity to begin exploring the cutting edge field of digital photography, using the latest Adobe software available in the industry. This course consists of lecture, textbook assignments as well as darkroom and studio projects. Field trips to local businesses and location shots enhance the hands-on learning experience.

Essential Requirements:
Students will demonstrate and document the following:

- Pinhole camera construction and usage
- Basic understanding and use of software basics for photographic imaging and digital printing
- Dry mounting and presentation techniques
- Basic camera functions in DSLR
- Students will develop a 2D art portfolio to submit for the AP Portfolio Exams

TWO HOUR BLOCK

Prerequisite Courses: None

Preferred: Art 1 or an Art Portfolio

Applies toward graduation requirements of: 1 Visual/Performing Arts credit

AP Macroeconomics	Credit ½	12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Advanced Placement Macroeconomics is an introductory college-level course that focuses on the principles that apply to an economic system as a whole. The course will place particular emphasis on the study of national income, price determination, as well as supply and demand curve analysis. Additional subjects of study will include economic indices; financial intermediation and markets; stabilization policies; economic growth; and international trade. The U.S. Federal Reserve System and comparative economic theories will also be examined in detail. Students will utilize graphs, charts, and data to analyze, describe, and explain economic concepts. Advanced Placement Macroeconomics is a one semester course.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: There are no specific prerequisite courses that are required for enrollment in AP Macroeconomics. Nonetheless, students enrolling in this course should be prepared for challenging readings, assignments, and exams.

Applies toward graduation requirements of: ½ Social Studies credit

***This course applies to the Financial Literacy Credit for graduation.**

College Algebra	Credit ½ 3 Credits @ MSU Billings	11, 12
Course Name	**Semester 1**	**Grade Level**

Course Description: College Algebra is a rigorous course that analyzes and interprets the behavior and nature of functions including linear, quadratic, polynomial, rational, exponential, logarithmic, power, absolute value, and piecewise-defined functions. Additional topics include systems of equations, matrices, and making decisions using probability. This course qualifies for Dual Enrollment Credit through Montana State University Billings. Students must pass entrance requirements and pay course fees for M 121.

Prerequisite Courses: Algebra 2 with a C or better and a GPA of 2.5 or higher or a qualifying test score of a 22+ on the ACT Math Test or a qualifying test score on the EdReady assignment

Applies toward graduation requirements of: 2 Math credits or 7 Elective credits

College Technical Math	Credit ½ 3 Credits @ City College MSU Billings	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Applies math to problems drawn from diverse occupational fields. In addition to a review of operations on rational numbers, the topics of measurement, percent, proportion and variation, applications of algebra to the extent of solving quadratic equations, and applications of plane and solid figure geometry are developed for use in a trade of industrial setting. The course may serve as a prerequisite to M 114, but does not satisfy the prerequisite of any other math courses. Credits apply to graduation but do not fulfill General Education requirements. This course is a dual credit course and with successful completion, 3 college credits will be awarded for M 111 Technical Mathematics at City College MSU-B.

In the event of over enrollment, **first criteria** for considerations shall be current daily attendance. Attendance is required and documented.

Prerequisite Courses: Completion of Geometry with a C or better and a GPA of 2.0 or higher or a qualifying test score on the EdReady assessment.

Applies toward graduation requirements of: 2 Mathematics credits or 7 Elective credits

College Extended Technical Math	Credit ½ 3 Credits @ City College MSU Billings	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course applies math to problems drawn from diverse occupational fields. The course provides for the study of measurement, algebra, geometry, and trigonometry as needed to solve mathematical applications in a trade or technical work environment. Technical Math is a course designed for students who are considering going into a vocational or technical career. This class is a mixture of math skills from a variety of mathematical principles that focus strongly on the application of these skills to solve problems drawn from diverse occupational fields. The majority of the class time will be spent on integrating a variety of technical terms and tools to solve mathematically related problems that are common to real life workplace situations. An example of what a problem in this course may look like is: Find how many horsepower a motor would receive if it is 80% efficient with a 6.20 horsepower output. This course is a dual credit course and with successful completion, 3 college credits will be awarded for M 114 Extended Technical Mathematics at City College MSU Billings.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

Prerequisite Courses: Completion of College Technical Math with a C or better or a qualifying test score of 22+ on ACT Math or a qualifying test score on the EdReady assessment.

Applies toward graduation requirements of: 2 Mathematics credits or 7 Elective credits.

College Introduction to Statistics	Credit ½ 4 Credits @ MSU Billings	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: College Introduction to Statistics covers descriptive techniques, probability distributions, and statistical inference of one and two sample tests and associated confidence intervals for means and proportions and linear regression. Introduces statistical analysis using technology. This course qualifies for Dual Enrollment Credit through Montana State University Billings. Students must pass entrance requirements and pay course fees for STAT 216, Introduction to Statistics, 4 University Credits.

Prerequisite Courses: Algebra 2 with a C or better and a GPA of 2.5 or higher or a qualifying test score of 22+ on the ACT Math Test or a qualifying test score on the EdReady assessment.

Applies toward graduation requirements of: 2 Math credits or 7 Elective credits

College Writing/English 4	Credit 1 3 Credits @ City College MSU Billings and MSU Billings	12
Course Name	**Semester 1 & 2**	**Grade Level**

Course Description: This course covers the Billings Public Schools English 4 curriculum and integrates and provides instruction in writing competencies expected of college students. It pays special attention to writing as a problem-solving process, patterns of organization in personal and informative writing, and logical thinking and style in argumentative/persuasive writing. Students are immersed in the writer's workshop classroom model through writing and responding to writing (their own and from other authors) on a daily basis. It is the equivalent to Writing 101 which is offered at City College MSU Billings and MSU Billings. This is a concurrent enrollment course and students will be required to test into it in order to receive college credit. Other requirements may apply. Please contact your counselor for additional information.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

City College/MSU Billings and MSU Billings: 3 credits in WRIT 101 will be issued to students who pass the College Writing/English 4 class and complete all WRIT 101 competencies.

Prerequisite Courses: Successful completion of English 3
Qualifying score on either the Accuplacer or the ACT

Applies toward graduation requirements of: 4 English credits

College Intro to Literature	Credit ½ 3 Credits @MSU Billings	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Provides the opportunity for students to study and reflect upon the themes presented in the body of literature being presented (short and long fiction, dramatic and lyric poetry). This course emphasizes comprehension, discernment, and critical thinking skills while students determine the underlying assumptions and values within the reading selections. Students will study how works of literature reflect society's problems and culture while studying advanced literary techniques (irony, satire, connotation, rhythm, etc). Oral discussion is an integral part of literature courses and written assignments are an additional method to develop analytical skills. The literature selections may reflect a specific genre or theme or a particular time period or people.

This course is the equivalent of LIT 110 Introduction to Literature (3 Credits) at MSU Billings.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

Prerequisite Course: None

Applies toward graduation requirements of: 7 Elective credits

College Creative Writing	Credit ½ 3 Credits @MSU Billings	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Provides students with a versatile platform for honing their writing skills and cultivating their distinctive style across a wide spectrum of literary forms, including poetry, short stories, drama, essays, and various prose genres. While the primary focus is on the act of writing itself, this course also delves into the exploration of exemplary works and authors as models to enrich students' understanding of the art and craft of writing. The course introduces the fundamental principles and techniques essential for creative writing. From personal expressions in simple narratives and descriptions to the foundational elements of fiction and poetry, students embark on a creative journey that fuels their development as writers.

This course is the equivalent of CRWR 240, Introduction to Creative Writing Workshop, at MSU Billings.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: None

Applies toward graduation requirements of: 7 Elective credits

College American History 1	Credit ½ 3 Credits @ MSU Billings	11
Course Name	**Semester 1** ***To be taken with College American History 2** **2nd Semester (Full Year Course)**	**Grade Level**

Course Description: Surveys American history from the establishment of the colonies to the end of the Reconstruction period after the Civil War. Includes such topics as the English political and cultural heritage, independence, creation of the Constitution, early national period, increasing democracy, economic problems, manifest destiny, slavery, sectionalism, disunion, war, and reunion

This course is the equivalent of HSTA 101 American History 1 (3 credits) at Montana State University-Billings.

Prerequisite Courses: It is recommended that students take College American History 2 second semester.

Applies toward graduation requirements of: 1 United States History credit

College American History 2	Credit ½ 3 Credits @ MSU Billings	11
Course Name	**Semester 2**	**Grade Level**

Course Description: Surveys the political, economic, and social development of the U.S. since Reconstruction. Deals with industrialization and the agrarian reaction, Progressive Era, U.S. reaction to World War I, 1920's, Depression and the New Deal, background to involvement in World War II, Cold War Leadership, (including Korea and Vietnam), and the domestic changes since World War II.

This course is the equivalent of HSTA 102 American History 2 (3 credits) at Montana State University-Billings.

Prerequisite Courses: It is recommended that students take College American History 1 first semester.

Applies toward graduation requirements of: 1 United States History credit

College American Government	Credit ½ 3 Credits @ MSU Billings	12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Covers the American Political System relative to central government and institutions. Attention is given to concepts, organizations and functions with emphasis on the political, governmental and democratic processes and problems, including the role of individual and group relationships. Provides a perspective and background for further study in Political Science. Please see individual school's syllabus for additional topics. Students must meet entrance requirements and pay course fees.

City College/MSU-Billings: 3 credits in PSCI 210 Introduction to American Government will be issued to students who pass all competencies.

Prerequisite Courses: Qualifying score on the ACT or on the Accuplacer Exam.

Applies toward graduation requirement of: ½ United States Government credit

College Intro to Psychology	Credit ½ 3 Credits @ MSU Billings	12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course is an introduction to the nature and scope of the field of psychology as a scientific and human endeavor. Major topics include: historic development of the field; biological and developmental processes; consciousness and perceptions; learning, remembering, and thinking; motivation and emotion; personality and individuality; social behavior; normal stress and coping; and abnormal psychology and treatment methods.

This course is the equivalent of PSYX 100, Introduction to Psychology, at MSU Billings.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: There are no specific prerequisite courses that are required for enrollment. Nonetheless, students enrolling in this course should be prepared for challenging readings, assignments, and exams.

Applies toward graduation requirements of: ½ Social Studies credit

College Intro to Public Speaking	Credit ½ 3 Credits @ MSU Billings	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Develops the student's speaking abilities. Students acquire an understanding of basic rhetorical theory and its application in a variety of speech situations. Listening, speaking, and critiquing abilities are emphasized. This course addresses the following topics: speech preparation and delivery, forming and fielding questions, audience analysis, listening skills, critiquing and speaker anxiety.

This course is the equivalent of COMX 111 Introduction to Public Speaking-(3 Credits) at MSU-Billings

Prerequisite Courses: None

Applies toward graduation requirements of: 7 Elective credits

College Biology	Credit 1 4 Credits @ MSU Billings	9, 10, 11,12
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: This course includes discussion of the most important concepts in Biology. Lectures cover cells (structure and physiology), genetics, (cellular reproduction, genes, the nature of heredity and evolution), ecology and the diversity of life (plants, animals, microorganisms and their ecological relationships). Lab exercises will introduce students to experiments designed to examine major conceptual ideas in Biology such as cells, cell reproduction, metabolism, molecular genetics, evolution, and diversity. This course is a dual credit course and with successful completion, four (4) college credits will be awarded at MSU Billings.

This course is the equivalent of BIOB 101 Discover Biology (3 credits) and BIOB 102 Discover Biology Lab (1 credit) at MSU Billings. As such, students should anticipate and prepare for a rigorous pace with regular assessment processes through both semesters.

Essential Requirements:

- Demonstrate competent to proficient math (including Algebra, graphing, and analyzing data), and writing and reading skills.
- Demonstrate an ability to follow written and verbal instructions.
- Demonstrate an ability to work well in small groups with peers.
- Demonstrate an ability to work independently and be self-motivated, including appropriate use of time provided in class, as well as managing time and workflow outside of school hours to study and complete assigned tasks in the time allotted.
- Demonstrate an ability to follow lab safety protocols.
- Demonstrate an ability to perform basic computer skills.

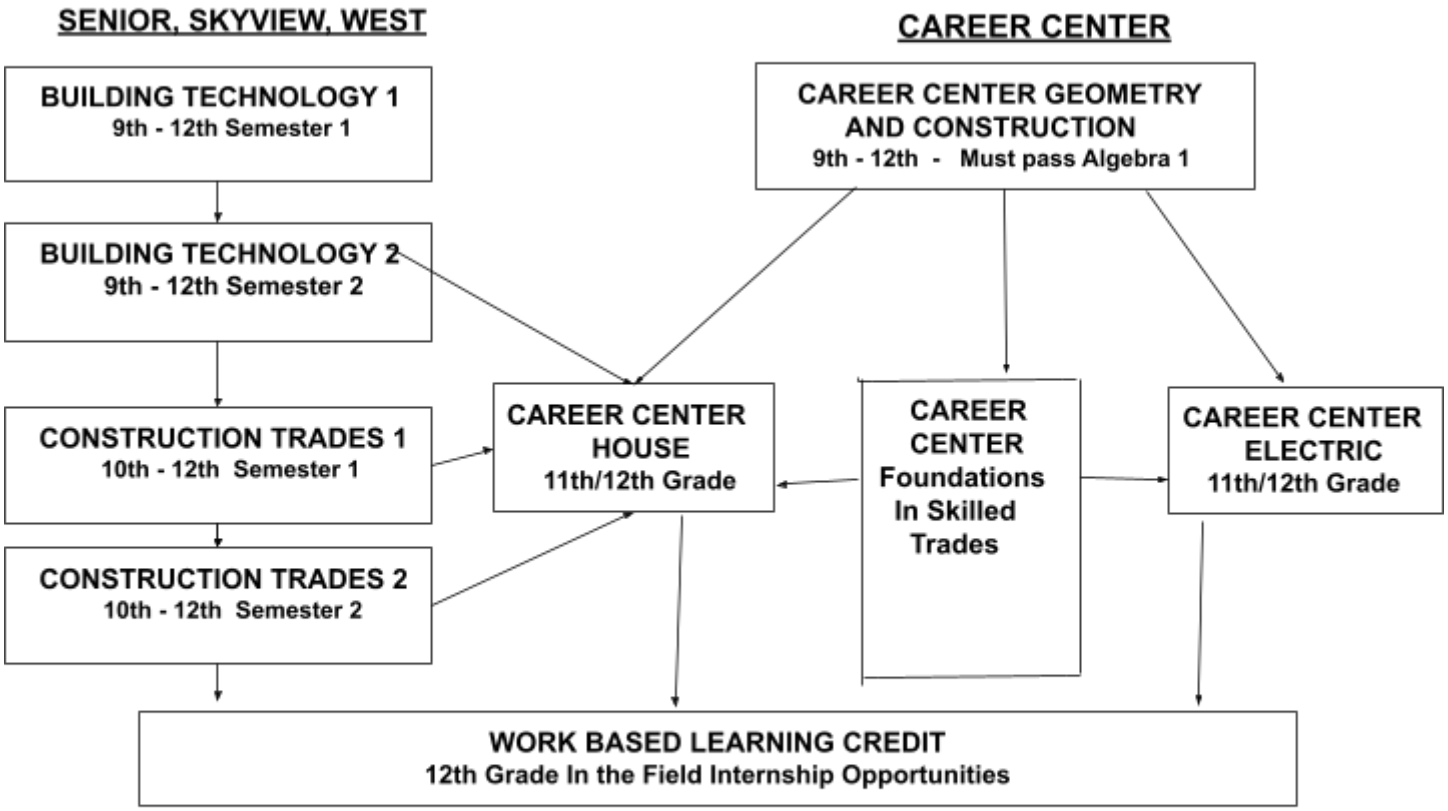
ONE HOUR CLASS

Prerequisite Courses:

- Successful completion of grade-level appropriate Math classes.
- Successful completion of all previous years of English classes.
- Successful completion of prior science classes with grade of ‘C’ or better.
- Students with a grade lower than a C Semester 1 will be moved to a traditional biology course.

Applies toward a graduation requirement of: 1 Biology Science credit or 7 Elective credits.

BPS CONSTRUCTION PATHWAYS



*Construction
*Electrical
*Plumbing

*HVAC
*Concrete/Masonry
*Design & Drafting

Foundation in Skilled Trades	Credit ½	10, 11,12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Foundations in Skilled Trades introduces students to the essential skills and knowledge required for a variety of in-demand trades. This hands-on course provides foundational instruction in plumbing, HVAC (Heating, Ventilation, and Air Conditioning), masonry, tiling, and other key construction and technical fields.

Students will learn basic principles, safety protocols, and industry-standard techniques while using professional tools and materials. Through practical projects and real-world problem-solving, participants will gain valuable insight into the skills
and career opportunities available in the trades.

This course is ideal for students interested in exploring multiple trades as potential career paths or seeking to develop practical skills for personal and professional use.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

Drafting Careers Exploration	Credit ½	9, 10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Geared for students with an interest in careers that use drafting skills and applications. Drafting Careers Exploration courses expose students to the opportunities available for drafts people (Engineering, architectural, industrial, and so on). These courses serve to introduce basic skills and the field in general, providing students with the opportunity to identify a focus for continued study or to determine that their interests lie elsewhere.

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

Technical Geometry Geometry in Construction	Credits 2 1 Math - 1 Career Technical Education	9, 10, 11
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: This course is designed to show the relevance of Geometry through a variety of practical applications related to but not limited to the construction industries. Students will be: participating in hand-on activities, working in a classroom & shop setting, participating in the construction of a house, and investigating business components in construction and related industries. Students who are interested in architecture, interior design, engineering, construction management, drafting, building trades (electrical, plumbing, etc.) as well as all aspects of manufacturing would benefit from this course. The objectives of this course are to promote academic rigor and real world relevance by having students solve multi-step problems, engage in math concepts that appear in different phases of construction and work in a team setting.

Essential Requirements:

- Students will participate in all aspects of safety, related to construction and manufacturing industries.
- Students will work in shop and construction site environments.
- Students will successfully complete the Geometry requirements as indicated in the All Billings Curriculum.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

TWO HOUR BLOCK

Prerequisite Courses: Algebra 1 with a “C” grade or better

Applies toward graduation requirements of: 2 Math credits and 1 Career Technical Education credit

Construction Fundamentals 1 Carpentry 1 Construction Technique 1	Credit 1 ½ 4 Credits @ City College MSU Billings	11, 12
Course Name	**Semesters 1 of Full Year Course**	**Grade Level**

Course Description: First year house construction students will work hands-on in the construction of this year's student built house. This is a real house you will be building. Students will develop skills and valuable construction knowledge in the first phases of the building construction trades. Students will learn the dynamics of a real residential house construction site. Students will receive on the job training as they learn the trades and experience the work ethics of residential construction. Students will complete: safety training, framing, stairs, roofing, exterior window and door installation, soffit and fascia, heating and cooling (with subcontractors), plumbing (with subcontractors), insulation, and drywall hanging.

Dual Credit Option: High school students have the opportunity to earn both high school and college credit through City College MSU Billings by enrolling in CSTN 120: Carpentry Basics and Rough-in Framing.

Essential Requirements:

- Students must have strong math skills and be comfortable with fractions.
- Students must be able to read and understand a tape measure.
- Students should have some understanding of the following equation: $a^2 + b^2 = c^2$
- Ability to work safely, independently and as part of a team, and without constant supervision are critical to this class.
- Attendance is extremely important as this is a hands-on class building a house and make up work is difficult to replicate.

NOTE: This is a mostly outdoor class. Students will be exposed to the elements and working in temperatures ranging from 20 to 100 degrees. You will get hot, cold, and dirty.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

THREE HOUR BLOCK
Fall Enrollment Only

Students must take prerequisite courses from their home high school or the Career Center or have instructor/administrator approval to take this course.

Home High School Prerequisite Courses: At least one year in the Building Tech/Construction Trades pathway with a "C" or better; Or Build Tech 1 along with one year of Geometry with a "C" or better.

Career Center Prerequisite Courses: Geometry in Construction with a "C" or better; Or Foundations in Skilled Trades along with completion of one year of Geometry with a "C" or better; Or Interior Design & Design Improvement with a "C" or better.

Applies toward graduation requirements of: 1 Career Technical Education credit

Construction Fundamentals 2
Carpentry 2 **Credit 1 ½**
Construction Technique 2 **4 Credits @ City College MSU Billings** **11, 12**

Course Name **Semesters 2 of Full Year Course** **Grade Level**

Course Description: First year house construction students will continue to work hands-on in the construction of this year's student-built house. Students will develop skills and valuable construction knowledge in the finishing phases of the building construction trades. Students will learn the dynamics of a real residential house construction site. Students will receive on the job training as they learn the trades and experience the work ethics of residential construction. Students will complete: insulation, drywall hanging, drywall taping, interior door installation, trim out and finish carpentry, cabinet installation, floor coverings, siding and stone applications, deck building, and all aspects of detailing out a new house.

Dual Credit Option: High school students have the opportunity to earn both high school and college credit through City College MSU Billings by enrolling in CSTN 142: Interior and Exterior Finishing

Essential Requirements:

- Students must have strong math skills and be comfortable with fractions.
- Students must be able to read and understand a tape measure.
- Students should have some understanding of the following equation: $a^2 + b^2 = c^2$
- Ability to work safely, independently and as part of a team, and without constant supervision are critical to this class.
- Attendance is extremely important as this is a hands-on class building a house and make up work is difficult to replicate.

NOTE: This is a mostly outdoor class. Students will be exposed to the elements and working in temperatures ranging from 20 to 100 degrees. You will get hot, cold, and dirty.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

THREE HOUR BLOCK
Fall Enrollment Only

Prerequisite Courses: Construction Fundamentals 1, Carpentry 1, Construction Technique 1 with a grade of "C" or better or with instructor/administrative approval.

Applies toward graduation requirements of: 1 Career Technical Education credit

Building Trades 1
House Building 1

Construction Technique 3	**Credits 1 ½**	**12**
Course Name	**Semester 1 of Full Year Class**	**Grade Level**

Course Description: Second year house construction students will work with first year students to complete this year's student-built house. The second-year student will serve as a leader to demonstrate good work ethics and help guide first year students through the building construction trades. Second year students will expand their knowledge and refine their skills as they work to complete a second house. The second-year student should achieve greater proficiency in their work and the development of their skills. Students will complete: framing, stairs, roofing, exterior window and door installation, soffit and fascia, heating and cooling (with subcontractors), plumbing (with subcontractors), insulation, and drywall hanging.

Dual Credit Option: If a student did not earn College Credit in their previous year of construction, they may enroll in CSTN 120: Carpentry Basics and Rough-in Framing through City College MSU-B.

Essential Requirements:

- THIS IS NOT JUST A REPEAT OF 1ST YEAR HOUSE CONSTRUCTION. Second year students will be held to much higher standards!
- Second year students will take on more challenges than 1st year students and will need strong problem- solving skills (material estimations, more complex wall and truss layouts, stair building, etc).
- Students must have strong math skills and be comfortable with fractions.
- Students must be able to read and understand a tape measure.
- Students must understand the following equation: $a^2 + b^2 = c^2$
- Ability to work safely, independently and as part of a team, and without constant supervision are critical to this class.
- Attendance is extremely important as this is a hands-on class building a house and make up work is difficult to replicate.

NOTE: This is a mostly outdoor class. Students will be exposed to the elements and working in temperatures ranging from 20 to 100 degrees. You will get hot, cold, and dirty.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

THREE HOUR BLOCK

Prerequisite Courses: Construction Fundamentals 1 & 2, Carpentry 1 & 2, Construction Technique 1 & 2 with a grade of “B” or better or with instructor/administrative approval.

Applies toward graduation requirements of: 1 Career Technical Education credit

Building Trades 2
House Building 2

Construction Technique 4	**Credits 1 ½**	**12**
Course Name	**Semester 2 of Full Year Class**	**Grade Level**

Course Description: Second year house construction students will receive the hands-on training that comes with working through the last phases of house construction. Second year students will experience the challenges of house construction with a greater level of understanding. Students will benefit from the development of skills with a higher proficiency and the diverse knowledge that comes with two years of training. Students will enter the job market with confidence and success. Students will complete: insulation, drywall hanging, drywall taping, interior door installation, trim out and carpentry, cabinet installation, floor coverings, siding and stone applications, deck building, and all aspects of detailing out a new house.

Dual Credit Option: If a student did not earn College Credit in their previous year of construction, they may enroll in CSTN 142: Interior and Exterior Finishing through City College MSU-B.

Essential Requirements:

- THIS IS NOT JUST A REPEAT OF 1ST YEAR HOUSE CONSTRUCTION. Second year students will be held to much higher standards!
- Second year students will take on more challenges than 1st year students and will need strong problem- solving skills (specialized door installation, complicated finish carpentry such as tray ceilings and stair trim, siding installation in non rectangular spaces, material estimations, stone mailbox construction, etc).
- Students must have strong math skills and be comfortable with fractions.
- Students must be able to read and understand a tape measure.
- Students must understand the following equation: $a^2 + b^2 = c^2$.
- Ability to work safely, independently and as part of a team, and without constant supervision are critical to this class.
- Attendance is extremely important as this is a hands-on class building a house and make up work is difficult to replicate.

NOTE: This is a mostly outdoor class. Students will be exposed to the elements and working in temperatures from 20 to 100 degrees. You will get hot, cold, and dirty.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

THREE HOUR BLOCK

Prerequisite Courses: Building Trades 1, House Building 1, Construction Technique 3 with a grade of “B” or better or with instructor/administrative approval.

Applies toward graduation requirements of: 1 Career Technical Education credit

Cafe Protege (Culinary Arts for Industry)	**3 Credits (1 ½ credit per semester)**	**11, 12**
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: This course is an introduction to the restaurant and foodservice industry covering culinary skills, management, and restaurant operations critical for success in the Foodservice and Hospitality Industry. In addition to the fun and excitement of food preparation and service these topics will be explored:

- Restaurant and foodservice history
- Food and workplace safety
- Knife skills, knife skills, and more knife skills
- Cooking methods and the proper cooking equipment, techniques, and skills
- Stocks, sauces, and soups
- Product identification with meats, vegetables, fruits, grains, and more
- Baking principles and fundamentals of bakeshop production: breads, cookies, cakes, and pastries
- Food cultures and styles from around the United States and the world
- Accounting, food cost controls, marketing
- Catering fundamentals, buffet service, restaurant operations, off-site events
- Entrepreneurial overview: mobile food operations, introduction to entrepreneur basics

Essential Requirements:

- Distinguish the many segments of the foodservice industry
- Become proficient in food safely practices
- Develop and sustain essential knife skills
- Adapt a working knowledge of basic cooking methods
- Identify, purchase, store, and properly cook proteins, vegetables, fruits, grains, and starches and the fundamentals of seasoning and flavoring
- Establish fundamental baking skills and regularly produce breads, cookies, cakes, pies, and pastries
- Participate in menu planning, purchasing, and preparation for buffets and catering events

Cafe Protege will be held at the Lincoln Center. Transportation will be available if needed.

Chef coats and headgear will be provided.

Students are urged and assisted to seek employment in local food service establishments in such roles as paid internships, job shadow, and work study programs. In addition to internships, students will also participate in school district catering projects and local benefits which include: menu planning, purchasing, preparation, set up, service, and clean up.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

THREE HOUR BLOCK

Prerequisite Courses: Priority is given to students with prior culinary coursework.

Applies toward graduation requirements of: 1 Career Technical Education credit

Home Design Interior Design	Credit 1 6 Credits @ Gallatin College	11, 12
Course Name	**Semesters 1 of Full Year Course**	**Grade Level**

Course Description: This course provides skills with both a computer and hands-on approach to learning. Students complete comprehensive assignments where they apply all of the skills and knowledge obtained throughout the course. They work with community vendors to select: paint, flooring, lighting, tile, appliances, fixtures, and wallpaper for a student-built house. They also learn the basics in AutoCAD and Sketchup. This course is designed to teach the skills needed to be a professional in the design industry and meets the needs of students who desire to receive dual credit for a post-secondary education.

Dual Credit Option: High school students who take Home/Interior Design and Home/Design Improvement for the full year maintaining a C or better have the opportunity to earn both high school and college credit through Gallatin College by enrolling in IDSN 101: Intro to Interior Design (3 credits) and/or IDSN 122: Textiles and Interior Finishes (3 credits).

Essential Requirements:

- Identify factors and characteristics that impact the interiors of a space by applying the elements and principles of design.
- Interpret written and verbal directions for drawing/modeling an interior design project.
- Demonstrate communication skills that promote positive relationships in the workplace by working in cooperative groups to implement a design plan for the Career Center student-built house.
- Communicate design ideas through visual and oral presentations.
- Describe careers in the interior design industry by classifying careers that range from entry level to professional.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

TWO HOUR BLOCK

Prerequisite Courses: Priority will be given to students with prior related coursework.

Applies toward graduation requirements of: 1 Career Technical Education credit

Home Improvement Design Improvement	Credit 1 6 Credits @ Gallatin College	11, 12
Course Name	**Semester 2 of Full Year Course**	**Grade Level**

Course Description: This course provides students with the essential skills and knowledge needed to make basic home improvements through a hands-on approach to learning. Students will learn spatial layout and the staging process of the student-built home. They will learn how to select product/material, provide an explanation of why selected, and model how to implement their selection in the work room or on site. Highlights include: painting, wallpaper installation, tile installation, mural design, etc. Students will learn from: professional presenters, field trips to industry related companies, and working/practicing on site at the Career Center house. This class will teach basic skills necessary to maintain and enhance a home.

Dual Credit Option: High school students who take Home/Interior Design and Home/Design Improvement for the full year maintaining a C or better have the opportunity to earn both high school and college credit through Gallatin College by enrolling in IDSN 101: Intro to Interior Design (3 credits) and/or IDSN 122: Textiles and Interior Finishes (3 credits).

Essential Requirements:

- Calculate quantities, measure, order and install product.
- Students will develop skills needed to complete interior projects on site or in the workroom.
- Will learn how to understand and stay within a budget.
- Students will communicate design ideas through visual and oral presentations to professionals and peers.
- This class will analyze career options available in the home improvement industry.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

TWO HOUR BLOCK

Prerequisite Courses: Priority will be given to students with prior related coursework.

Applies toward graduation requirements of: 1 Career Technical Education credit

College Introduction to Interior Design	Credit 1 3 Credits @ Gallatin College	11, 12
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: This course introduces design as it relates to interior design, architecture and related professions, through the study of the elements and principles of design, tools of design and exploration of the ways in which humans interact with designed environments. Students develop an appreciation for the responsibilities of the profession. The objective of this course is to provide a successful transition from high school to postsecondary education.

This course is embedded within Home Design/Interior Design and Home Improvement/Design Improvement. To qualify for enrollment, students must maintain a grade of C or better in the full year course.

Essential Requirements:

- Demonstrate an understanding of the development of architecture and interior design as professions including technical and regulatory elements, historical, current and future directions by successfully completing exams and/or projects
- Demonstrate the ability to distinguish and apply the terminology utilized in the fields of architecture and interior design
- Demonstrate an understanding and appreciation of the basic principles of architecture and interior design including space planning through the study of the design process, design principles and elements, human perception, building materials, furniture selection, textiles, lighting, color, accessories, human factors and business considerations
- Demonstrate an understanding of the elements and principles of design by successfully creating an elements and principles project
- Demonstrate an understanding of a design concept. An example of this is to create a successful concept board.
- Demonstrate an understanding of the diversity of needs and human factors in planning space with a presentation of their project. Their project and presentation will be done with proficiency.
- Demonstrate an understanding of the fundamentals of environmental design by showing a proficient understanding through project/question-based evaluation.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

PART OF A TWO HOUR BLOCK

Prerequisite Courses: Priority will be given to students with prior related coursework.

Applies toward graduation requirements of: 1 Career Technical Education credit

College Textiles and Interior Finishes	Credit 1 3 Credits @ Gallatin College	11, 12
Course Name	**Semesters 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: This course includes the study of textiles and interior finishes used by interior designers. Students will gain familiarity with a wide range of textile products used in both residential and commercial interiors including fiber content and yarn type, application and labeling, performance and maintenance. Materials will also include study the range and application of wall, ceiling and floor finish materials commonly used in interior design and finally how to communicate these decisions with the design team.

This course is embedded within the Home Design/Interior Design and Home Improvement/Design Improvement. To qualify for enrollment, students must maintain a grade of C or better in the full year course.

Essential Requirements:

- Demonstrate knowledge of textile characteristics including fiber, yarn, construction, and finishes by identifying, classifying, and evaluating material samples.
- Demonstrate an understanding of textile applications and performance criteria for residential and commercial interiors through written exams and applied design projects.
- Apply appropriate standards for textile labeling, codes, and maintenance in material selection exercises.
- Demonstrate an understanding of various wall, ceiling, and floor finishes and their relationship to design function, aesthetics, and building systems.
- Accurately specify materials and finishes for a design project and communicate these selections using professional documentation methods such as specification sheets, material boards, and digital presentations.
- Integrate sustainability principles in the evaluation and selection of textiles and finishes.
- Demonstrate effective collaboration and communication with peers and the design team in presenting finish concepts.
- Exhibit professional work habits including responsibility, time management, and attention to detail through participation and project completion.

In the event of over enrollment, first criteria for consideration shall be current daily attendance. Attendance is required and documented.

PART OF A TWO HOUR BLOCK

Prerequisite Courses: Priority will be given to students with prior related coursework.

Applies toward graduation requirements of: 1 Career Technical Education credit

Manufacturing Processing 1 Manufacturing Design 1	Credit 1	11, 12
Course Name	**Semester 1 of Full Year Course**	**Grade Level**

Course Description: This course offers students the opportunity to learn and explore the many aspects of metals manufacturing. Students will explore a variety of welding processes through hands-on interaction in the welding lab. These processes may include plasma cutting, shielded metal arc welding, and gas metal arc welding. Students will learn basic blueprint reading, layout techniques, and measurement skills. It is our goal to explore as many manufacturing processes as possible to prepare students for a career in metals manufacturing.

Essential Requirements

- Ability to work safely in a shop environment
    - Follow Strict safety protocols
    - Stand for long periods of time, dexterity to weld in various positions and work for two full class periods
    - Tolerate noise, heat, sparks, fire, smoke and fumes
    - Possess good eyesight
- Ability to work in groups with peers
    - Maturity to work collaboratively without frequent redirection
- Ability to work independently to complete given assignments
    - Maturity to work independently without frequent redirection
- Basic math and measuring skills

In the event of over enrollment, criteria for consideration are as follows:

1. Pathway Interest - students should have an interest in welding or related fields such as construction, engineering, manufacturing or industrial maintenance. Previous experience in shop classes is highly beneficial and provides a strong foundation for success.
2. Safety Record - since significant hazards are involved in welding, a strong disciplinary record is necessary. Students must follow strict safety protocols, show maturity and responsibility.
3. Attendance - this is a hands-on, performance-based course, so consistent attendance is essential for mastering techniques and completing required assignments.

<u>TWO HOUR BLOCK</u>

Prerequisite Courses: Basic Math skills

Applies toward graduation requirements of: 1 Career Technical Education credit

Manufacturing Processing 2

Manufacturing Design 2	**Credit 1**	**11, 12**
Course Name	**Semester 2 of Full Year Course**	**Grade Level**

Course Description: This exciting course offers students the opportunity to continue learning and exploring the many aspects of metals manufacturing. Students will explore a variety of advanced welding techniques through hands-on-interaction in the welding lab. Students will be exposed to out-of-position welding techniques using the Shielded Metal Arc Welding (SMAW) and Gas Metal Arc Welding (GMAW) processes, including Flux Cored Arc Welding (FCAW). It is our goal to explore as many manufacturing processes as possible to prepare students for a career in metals manufacturing.

Essential Requirements

- Ability to work safely in a shop environment
    - Follow Strict safety protocols
    - Stand for long periods of time, dexterity to weld in various positions and work for two full class periods
    - Tolerate noise, heat, sparks, fire, smoke and fumes
    - Possess good eyesight
- Ability to work in groups with peers
    - Maturity to work collaboratively without frequent redirection
- Ability to work independently to complete given assignments
    - Maturity to work independently without frequent redirection
- Basic math and measuring skills

In the event of over enrollment, criteria for consideration are as follows:

1. Grade of “C” or better in Manufacturing Processing 1 & Manufacturing Design 1
2. Pathway Interest
3. Safety Record
4. Attendance.

<u>TWO HOUR BLOCK</u>

Prerequisite Courses: Must have completed Manufacturing Process 1 & Manufacturing Design 1 with a grade of “C” or better or instructor / administrator approval.

Applies toward graduation requirements of: 1 Career Technical Education credit

Manufacturing Technology 1	**Credit 1**	
Manufacturing System 1	**5 Credits @ City College MSU Billings**	**12**
Course Name	**Semester 1 of Full Year Course**	**Grade Level**

Course Description: This exciting course offers students the opportunity to apply the skills learned in Manufacturing Process and Design. Along with learning stick, MIG, and TIG welding, students will learn advanced blueprint reading, layout techniques, measurement skills and field fabrication. Students will be given the opportunity to design and build personal projects of their choosing.

Dual Credit Option: High school students have the opportunity to earn both high school and college credit through City College MSU Billings by enrolling in WLDG 125: Cut/Shielded Mtl Arc Weld Lab.

Essential Requirements

- Ability to work safely in a shop environment
    - Follow Strict safety protocols
    - Stand for long periods of time, dexterity to weld in various positions and work for two full class periods
    - Tolerate noise, heat, sparks, fire, smoke and fumes
    - Possess good eyesight
- Ability to work in groups with peers
    - Maturity to work collaboratively without frequent redirection
- Ability to work independently to complete given assignments
    - Maturity to work independently without frequent redirection
- Basic math and measuring skills

In the event of over enrollment, criteria for consideration are as follows:

1. Grade of “C” or better in Manufacturing Processing 2 & Manufacturing Design 2
2. Pathway Interest
3. Safety Record
4. Attendance

<u>TWO HOUR BLOCK</u>

Prerequisite Courses: Must have completed: Manuf. Process 1 and Manuf. Design 1, Manuf. Process 2 and Manuf. Design 2 with a grade of “C” or better or instructor/administrator approval.

Applies toward graduation requirements of: 1 Career Technical Education credit

Manufacturing Technology 2	**Credit 1**	
Manufacturing System 2	**5 Credits @ City College MSU Billings**	**12**
Course Name	**Semester 2 of Full Year Course**	**Grade Level**

Course Description: This course allows students to apply their metal working skills to advanced manufacturing applications such as pipe welding, build to print manufacturing, automated plasma cutting, and metal working design and fabrication.

Dual Credit Option: High school students have the opportunity to earn both high school and college credit through City College MSU Billings by enrolling in WLDG 157: Semi-Automatic & SMAW Lab.

Essential Requirements

- Ability to work safely in a shop environment
    - Follow Strict safety protocols
    - Stand for long periods of time, dexterity to weld in various positions and work for two full class periods
    - Tolerate noise, heat, sparks, fire, smoke and fumes
    - Possess good eyesight
- Ability to work in groups with peers
    - Maturity to work collaboratively without frequent redirection
- Ability to work independently to complete given assignments
    - Maturity to work independently without frequent redirection
- Basic math and measuring skills

In the event of over enrollment, criteria for consideration are as follows:

1. Grade of “C” or better in Manufacturing Technology 1 & Manufacturing System 1
2. Pathway Interest
3. Safety Record
4. Attendance.

<u>TWO HOUR BLOCK</u>

Prerequisite Courses: Must have completed Manuf. Process 1 and Manuf. Design 1, Manuf. Process 2 and Manuf. Design 2, Manuf. Tech 1 and Manuf. System 1 with a grade of “C” or better or by instructor/administrator approval.

Applies toward graduation requirements of: 1 Career Technical Education credit

College Welding 125	Credit 1 5 Credits @City College MSU Billings	12
Course Name	**Semester 1**	**Grade Level**

Course Description: Student learning includes manual and semi-automated oxy-acetylene cutting processes and safety. Shielded Metal Arc Welding with 6010 electrode, which leads toward American Welding Society D1.1 and American Society of Mechanical Engineers Section IX structural certification. Learning the air carbon arc cutting, plasma arc cutting processes, and equipment set-up. Welding shop safety and quality are emphasized. Students who successfully complete this course will earn 5 college credits for WLDG 125 Cut/Shielded Mtl Are Weld Lab through City College MSU Billings.

Essential Requirements:

- Ability to work safely in a shop environment
- Ability to work in groups with peers
- Ability to work independently to complete given assignments
- Blueprint reading
- Basic Math
- Basic Measuring Skills

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

TWO HOUR BLOCK

Prerequisite Courses: Must have completed Manuf. Process 1 and Manuf. Design 1, Manuf. Process 2 and Manuf. Design 2 with a grade of “C” or better or by instructor/administrator approval

Applies toward graduation requirements of: 1 Career Technical Education credit

College Welding 157	**Credit 1** **5 Credits @City College MSU Billings**	**12**
Course Name	**Semester 2**	**Grade Level**

Course Description: Introduction of semi-automatic wire feed processes. This course leads to AWS and ASME qualification of plate (all positions) with the SMAW, GMAW, and FCAW processes. Safe practices and weld quality are major considerations. Students who successfully complete this course will earn 5 college credits for WLDG 157 Semi-Automatic & SMAW Lab through City College MSU Billings.

Essential Requirements:

- Ability to work safely in a shop environment
- Ability to work in groups with peers
- Ability to work independently to complete given assignments
- Blueprint reading
- Basic Math
- Basic Measuring Skills

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

TWO HOUR BLOCK

Prerequisite Courses: Must have completed Manuf. Process 1 and Manuf. Design 1, Manuf. Process 2, Manuf. Design 2, Manuf. Tech 1, Manuf. System 1 or College Welding 125 with a grade of “C” or better or with instructor/administrator approval

Applies toward graduation requirements of: 1 Career Technical Education credit

Machinist Technology-Manual	Credit ½	11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course explores and develops skills in basic machining technology as it applies to modern machining. It combines the applied technology of machining on lathes, mills, and drill presses. Students will complete a series of projects which will teach them skill sets which include: precision measurement using micrometers and calipers, threading, tapping, tapering, knurling, and traditional operation of the lathes, mills and drill presses. Students will have the ability to manufacture precision parts and produce quality projects upon completion of class.

Essential Requirements:

- Ability to follow written and verbal instructions
- Ability to understand and implement safety aspects of machining technology
- Ability to work safely with industrial equipment
- Ability to use basic math and precision measuring techniques
- Ability to perform basic machining tasks on lathes and mills
- Ability to work in groups with peers
- Ability to work independently and complete tasks in appropriate time allotted

In the event of over enrollment, criteria for consideration are as follows:

1. Pathway Interest
2. Safety Record
3. Attendance

ONE HOUR CLASS

Prerequisite Courses: None. Of the machining classes offered, it is recommended that this course be taken first.

Applies toward graduation requirements of: 1 Career Technical Education credit

CNC Machining Technology	Credit ½	10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course will introduce students to the world of Computer Controlled Machining and Cutting. Students will learn the basic concepts of 3D drafting and solid modeling then learn to convert their designs into actual parts by utilizing our industry proven CNC Mills and plasma cutter. All students will be involved with the NASA HUNCH program and build parts for the International Space Station. Students will leave this class with a basic foundation necessary for the manufacturing of precision components.

Essential Requirements:

- Basic Computer Skills
- Ability to work safely in a shop environment
- Ability to work in groups with peers
- Ability to work independently to complete given assignments

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: Priority consideration will be given to 11th and 12th grade students who have completed and earned credit in; a Drafting/CAD course, Introduction to Engineering Design, or Principles of Engineering.
*Due to class size limitations, Seniors will have 1st enrollment considerations, Juniors will have 2nd enrollment consideration, and Sophomores will be enrolled after Juniors/Seniors.
*Note 10th grade students are only eligible to take this course if they have completed and earned credit in Introduction to Engineering Design.

Applies toward graduation requirements of: 1 Career Technical Education credit

CNC Machining Technology & Design	Credit ½	10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course explores advanced applications of Computer Numerically Controlled machining through the use of Computer Aided Design (CAD) in conjunction with Computer Aided Manufacturing (CAM). Students will have the opportunity to learn advanced skills in precision measuring, use of digital readouts, drawing with basic CAD, and basic machine programming. These skills will be combined to program CNC lathes, mills, and plasma tables to machine precision parts during class.

Essential Requirements:

- Ability to follow written and verbal instructions
- Ability to understand and implement safety aspects of machining technology
- Ability to work safely with industrial equipment
- Ability to use basic math and precision measuring techniques
- Ability to perform basic machining tasks on lathes and mills
- Ability to work in groups with peers
- Ability to work independently and complete tasks in appropriate time allotted

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: First priority is given to students who have completed CNC Machining Technology with a grade of 'C' or better. Second priority is given to students who have completed a CNC Machining Technology with a grade of 'C' or better. Third priority is given to students who have completed Machinist Technology (manual) with a grade of 'C' or better.
*Priority consideration will be given to students who have completed and earned credit in; a Drafting/CAD course, Introduction to Engineering Design, or Principles of Engineering.

Applies toward graduation requirements of: 1 Career Technical Education credit

Computer Aided Design in Manufacturing-CAD Credit ½		**9, 10, 11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Students will use SolidWorks which is a 3D computer aided design (CAD) and computer aided engineering (CAE) software used locally and internationally by companies. It allows for rapid design of parts and assemblies. This class will teach students many of the 3D features in SolidWorks and then test competency. The students will gain a Certified SolidWorks Associate (CSWA). This will benefit students looking to the manufacturing pathway and engineering pathway.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

Automotive Fundamentals	Credit ½	10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Automotive Fundamentals is a course designed for students who are considering entering the automotive industry as well as those who want to learn the basic fundamentals of automobile service and repair. This course introduces the student to the various automotive systems and goes on to provide the foundations of tool use, basic and necessary vehicle maintenance, and automotive industry terminology. The course also provides students access to technical information for system service and introduces them to automotive careers and certifications.

Critical Concepts:

- Demonstrate and understand automotive literacy and safety
- Demonstrate an understanding of industry tools, measuring tools, and equipment
- Demonstrate an understanding of basic automotive systems
- Demonstrate an understanding of engine design, classification, and construction
- Perform vehicle inspections and maintenance on automotive systems.

In the event of over enrollment:

★ **First criteria** for consideration shall be the grades the student earned in previous automotive courses.
★ **Second criteria** will be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

Automotive Engines 1	Credit ½	10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course is an introduction to the design and operation of internal combustion engines. Students will learn to use repair manuals to correctly determine part numbers, torque specifications, read diagrams and perform maintenance procedures. Students acquire marketable employment skills by learning engine operation theory, proper tool and shop equipment use, and job safety requirements.

Critical Concepts:

- Demonstrate proper tool selection and usage
- Demonstrate the use of precision measuring tools
- Demonstrate an understanding of engine operating principles
- Identification of engine components
- Demonstrate how to disassemble and reassemble an engine
- Demonstrate how to troubleshoot an engine
- Demonstrate the use of on-line service and parts manuals

In the even of over enrollment:

★ **First criteria** for consideration shall be the grades the student earned in previous automotive courses.
★ **Second criteria** will be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

Automotive Powertrain	**Credit ½**	**11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course focuses on the theory and operation of the vehicle's drivetrain. This includes automatic and manual transmissions, clutches, torque converters, transfer cases, driveshafts and differentials.

Critical Concepts:

- Inspect and service drivetrain components and fluids
- Disassemble and reassemble both manual and automatic transmissions
- Identify components and explain power flow through transmissions
- Disassemble and reassemble a transfer case (4 wheel drive)
- Disassemble and reassemble a differential

In the even of over enrollment:

★ **First criteria** for consideration shall be the grades the student earned in previous automotive courses.
★ **Second criteria** will be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

Automotive Electrical	Credit ½ 2 Credits @ City College MSU Billings	11, 12
Course Name	**Semesters 1 or 2**	**Grade Level**

Course Description: This course covers electrical theory, diagnosis, and testing. Students will perform testing and services on the vehicle's battery, starting and charging system, as well as diagnose electrical faults using diagnostic equipment. Students will become NC3 certified in digital multimeters through the Snap-on Education Program and will also obtain certifications through General Motors Company.

Dual Credit Option: High school students have the opportunity to earn both high school and college credit through City College MSU Billings by enrolling in TRID 181: Transport Elect Systems Lec.

Critical Concepts:

- Demonstrate automotive industry communication and literacy skills
- Achieve NC3 certified in digital multimeters through the Snap-on Education Program
- Demonstrate proper soldering techniques
- Build an automotive test light and jumper wire
- Test and diagnose electrical faults using a multimeter
- Test and service a vehicle's battery, starting and charging the system

In the event of over enrollment:

★ **First criteria** for consideration shall be the grades the student earned in previous automotive courses.
★ **Second criteria** will be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

Automotive Chassis	Credit 1 2 Credits @ City College MSU Billings	11, 12
Course Name	**Semesters 1 or 2**	**Grade Level**

Course Description: This course will provide students the opportunity to acquire marketable skills in diagnosis, repair and service of automotive brake, suspension and steering systems. City College MSU Billings credits (2 credits) are available with research papers that demonstrate brake system proficiency at the conclusion of the course.

Dual Credit Option: High school students have the opportunity to earn both high school and college credit through City College MSU Billings by enrolling in AST 114: Automotive Brakes.

Critical Concepts:

- Understands automotive terminology as it pertains to brake systems
- Use precision measuring equipment
- Demonstrate automotive industry communication and literacy skills
- Demonstrate automotive industry workplace skills
- Demonstrate knowledge of brake, steering, and suspension systems theory
- Locate and identify chassis, suspension, and steering components
- Remove, inspect, assemble, and service brake, steering, and suspension system components.

In the event of over enrollment:

★ **First criteria** for consideration shall be the grades the student earned in previous automotive courses.
★ **Second criteria** will be current daily attendance. Attendance is required and documented.

TWO HOUR BLOCK

Prerequisite Courses: Successful completion of Automotive Engines 1 or Automotive Fundamentals

Applies toward graduation requirement of: 1 Career Technical Education credit

Automotive Engines 2	Credit 1	12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course will train students in engine rebuilding procedures, engine services, diagnostics, and performance testing.

In the classroom, students will learn the theory and operation of the automotive engine and its various systems. The focus will be on engine performance as well as current trends in engine design. Throughout the course students will obtain certifications awarded through General Motors Company.

In the lab students will disassemble, measure, reassemble, and test run an engine. They will also perform routine services on the fuel, cooling, and lubrication systems. As a class we will test performance engines on the dynamometer and study the results using different components.

Critical Concepts:

- Demonstrate automotive industry communication and literacy skills.
- Rebuild, measure, and test run an engine following industry standards
- Successfully diagnose common engine malfunctions
- Complete a timing chain repair on a modern engine
- Perform common maintenance services
- Retrieve diagnostic trouble codes using factory scan tools
- Performance test engines on a dynamometer and analyze the data

In the event of over enrollment:

★ **First criteria** for consideration shall be the grades the student earned in previous automotive courses
★ **Second criteria** will be a current daily attendance. Attendance is required and documented.

TWO HOUR BLOCK

Prerequisite Courses: Automotive Engines 1

Applies toward graduation requirements of: 1 Career Technical Education credit

College	Credit ½	
Automotive Electrical	**2 Credits @ City College MSU Billings**	**11, 12**
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This is a dual credit course through City College MSU Billings. Students will earn two credits in TRID 181 Transport Elect Systems Lec. by successfully completing the Automotive Electrical course. Students in College Automotive Electrical will follow the same curriculum as students in Automotive Electrical.

This course covers electrical theory, diagnosis, and testing. Students will perform testing and services on the vehicle's battery, starting and charging system, as well as diagnose electrical faults using diagnostic equipment. Students will become NC3 certified in digital multimeters through the Snap-on Education Program and will also obtain certifications through General Motors Company.

Critical Concepts:

- Demonstrate automotive industry communication and literacy skills
- Achieve NC3 certified in digital multimeters through the Snap-on Education Program
- Demonstrate proper soldering techniques
- Build an automotive test light and jumper wire
- Test and diagnose electrical faults using a multimeter
- Test and service a vehicle's battery, starting, and charging system

In the event of over enrollment:

★ **First criteria** for consideration shall be the grades the student earned in previous automotive courses.
★ **Second criteria** will be current daily attendance. Attendance is required and documented.

MSU Billings City College: 2 credits in TRID 292 Electrical/Electronic Systems 1 will be issued to students who pass the College Automotive Electrical class and complete all TRID 292 competencies.

ONE HOUR CLASS

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

Introduction to Electric Vehicles	Credit ½	10, 11,12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: This course offers students a practical understanding of EV powertrains, programming, system wiring, and high voltage safety. Students will build knowledge of the EV industry as they explore the science, technology, and mechanics behind electric and hybrid vehicles. Students will gain hands-on experience as they work as a team to build TopKart MSTEM3 electric go karts. They will learn how to program, test, troubleshoot and fine-tune the kart for optimal performance. They will gain knowledge of key components such as electric motors, high voltage battery systems, wiring and motor controller programming. This course is an exciting opportunity for students interested in automotive technology, engineering, and renewable energy.

Critical Concepts:

- Understand electrical theory and operation
- Achieve NC3 Certification in digital multimeters through the Snap-on Education Program
- Demonstrate proper soldering techniques
- Identify electrical system components and interpret powerflow through schematics
- Earn Level 1 High Voltage Safety Certification through Legacy EV
- Build, program, test and tune and electric TopKart

ONE HOUR CLASS

Prerequisite Courses: 10th grade must have successful completion of Intro to Engineering Design. No Prerequisites are required for 11th and 12th grade students.

Applies toward graduation requirements of: 1 Career Technical Education credit

Early Child Physical Development	Credit 1	
Early Child Intellectual Development	3 Credits @ MSU Billings	11, 12
Course Name	**Semester 1**	**Grade Level**

Course Description: You will gain practical teaching experience in one of the two Career Center Preschools, after learning teaching techniques in the high school classroom pertaining to children's physical, social, emotional, and cognitive development. Emphasis is placed on education through physical and intellectual development. Opportunities are provided to learn what is entailed in various specialized fields such as special education, speech, physical and occupational therapies, and pediatric nursing. Whatever path in life you choose, children will likely be a part of it; don't miss this opportunity to brighten your life and the lives of many children.

Dual Credit Option: High school students who take Early Childhood for the full year, have the opportunity to earn both high school and college credit through MSU Billings by enrolling in EDU 220/220L: Human Growth & Development with Lab.

Essential Requirements:

- Early childhood education training
- Teaching in the preschool
- Lesson planning for preschool
- Observation of preschool children
- Study of areas of child development
- Written evaluations

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

TWO HOUR BLOCK

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

Early Child Fundamentals
Early Child Physical Development **Credit 1 ½**
Early Child Intellectual Development **3 Credits @ MSU Billings** **11, 12**

Course Name	**Semester 1**	**Grade Level**

Course Description: Along with gaining practical teaching experience in the Career Center Preschools and learning techniques pertaining to children's development, this class stresses thematic lesson planning and teaching through centers. Opportunities are provided detailing specialized fields such as special education, speech, physical and occupational therapies, and pediatric nursing. This class provides in depth instruction for those considering early childhood education.

Dual Credit Option: High school students who take Early Childhood for the full year, have the opportunity to earn both high school and college credit through MSU Billings by enrolling in EDU 220/220L: Human Growth & Development with Lab.

Essential Requirements:
- Early childhood education training
- Teaching in the preschool
- Lesson planning for preschool
- Observation of preschool children
- Study of areas of child development
- Written evaluations

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

THREE HOUR BLOCK

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credits.

Early Child Social Development	**Credit 1**	
Early Child Emotional Development	**3 Credits @ MSU Billings**	**11, 12**
Course Name	**Semester 2**	**Grade Level**

Course Description: You will gain practical teaching experience in one of the two Career Center Preschools, after learning teaching techniques in the high school classroom pertaining to children's physical, social, emotional, and cognitive development. Emphasis is placed on education through social and emotional development. Opportunities are provided to learn what is entailed in various specialized fields such as special education, speech, physical and occupational therapies, and pediatric nursing. Whatever path in life you choose, children will likely be a part of it; don't miss this opportunity to brighten your life and the lives of many children.

Dual Credit Option: High school students who take Early Childhood for the full year, have the opportunity to earn both high school and college credit through MSU Billings by enrolling in EDU 220/220L: Human Growth & Development with Lab.

Essential Requirements:

- Early childhood education training
- Teaching in the preschool
- Lesson planning for preschool
- Observation of preschool children
- Study of areas of child development
- Written evaluations

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

TWO HOUR BLOCK

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

Children & Careers

Early Child Social Development	**Credit 1 ½**	
Early Child Emotional Development	**3 Credits @ MSU Billings**	**11, 12**
Course Name	**Semester 2**	**Grade Level**

Course Description: Along with gaining practical teaching experience in the Career Center Preschools and learning techniques pertaining to children's development, this class stresses thematic lesson planning and teaching through centers. Opportunities are provided to learn what is entailed in various specialized fields such as special education, speech, physical and occupational therapies, and pediatric nursing. This class provides in depth instruction for those considering early childhood education.

Dual Credit Option: High school students who take Early Childhood for the full year, have the opportunity to earn both high school and college credit through MSU Billings by enrolling in EDU 220/220L: Human Growth & Development with Lab.

Essential Requirements:

- Early childhood education training
- Teaching in the preschool
- Lesson planning for preschool
- Observation of preschool children
- Study of areas of child development
- Written evaluations

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

THREE HOUR BLOCK

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

College EDU Human Growth & Development	Credit 1 3 Credits @ MSU Billings	11,12
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: This class presents a comprehensive introduction to the study of human development including the developmental capabilities and needs of humans at different ages with respect to the physical, psychomotor, cognitive, social, emotional, and psychological domains that affect all education. The course includes 4.5 - 5 hrs per week lab at the Career Center Preschool. Students who successfully complete this full-year course will earn 3 college credits for EDU 220/220L through MSU Billings.

Essential Requirements:

- Early childhood education training
- Teaching in the preschool
- Lesson planning for preschool
- Observation of preschool children
- Study of areas of child development
- Written evaluations
- Research Paper
- Case Study Paper
- Final Project

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

This year long course is designed to be taken as part of a block schedule within the Early Childhood Education program.

TWO HOUR BLOCK

The course is offered as part of a **two hour block** with *Early Child Physical & Intellectual Development* (Semester 1) and *Early Child Social & Emotional Development* (Semester 2).

-or-

THREE HOUR BLOCK

The course is offered as part of a **three hour block** with *Early Child Fundamentals* and *Early Child Physical & Intellectual Development* (Semester 1) and *Child and Careers* and *Early Child Social & Emotional Development* (Semester 2).

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

Drone Learning Lab	Credit ½	10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Drone Learning Lab is designed to introduce the students to the world of commercial Drone piloting. The course will be focused on training and preparing students for the FAA section 107 license exam. Upon successful completion of the exam, students will earn their commercial Drone license, as well as having a working knowledge of basic aeronautics enabling them to use their knowledge and skills to operate drones safely and effectively for a variety of applications.

Essential Requirements:

- Provide students with an understanding of the science of flight.
- Explore the history, regulations, and possible career paths within the aviation industry.

In the event of over enrollment**, first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: None

Applies toward graduation requirements of: 1 Career Technical Education credit

PLTW Introduction to Engineering Design	1 Credit	9, 10, 11, 12
Course Name	**Semesters 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: This course teaches problem-solving skills used in the design development process. Models of product solutions are created, analyzed and communicated using the solid-modeling computer design software AUTODESK Inventor. This course, combined with traditional mathematics courses and science courses in high school, introduces students to the scope, rigor and discipline of engineering prior to entering college. Students will understand technology as a tool for problem solving, the scientific process, engineering problem solving and the application of technology. Additionally, students will be prepared for the rigor of college level engineering programs.

Students should definitely be taking or plan to take higher level math and science for 4 years of high school. Students should be in the top 1/3 of their class. Students should be interested in pursuing a degree in science, math, technology or engineering. Other important traits are: interested in computers, self-motivated, creative with art and design and enjoys solving problems.

For additional information: www.pltw.org

Essential Requirements:

- Understand technology as a tool for problem solving
- Understand the scientific process, engineering problem solving and application of technology.
- Understand technological systems as they interface with other systems.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Freshman students should have strong Algebra skills, be enrolled in Geometry or Honors Geometry, and be academically driven and organized. Freshmen will be taking this course with upper classmen and accountable for the same standards. Freshmen with these qualities have been very successful in the Engineering Program.

Required: Students should be on a 4-year math track.

Prerequisite Courses: Enrolled in Geometry or Honors Geometry or successfully completed Geometry with a ‘C’ or better. Strong Algebra 1 skills needed. Students do not need to take any Drafting or Computer Programming courses to be eligible for this course.

Note: Students must earn a ‘C’ or better in the first semester in order to remain in the class for the second semester.

Applies toward graduation requirements of: 1 Career Technical Education credit

PLTW Principles of Engineering - POE	1 Credit	10, 11, 12
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: This survey course of engineering exposes students to some of the major concepts they will encounter in a college engineering program. Students employ engineering and scientific concepts in the solution of design problems. Problem solving, research, math and science, critical thinking, and teamwork are essential components to success in the course. This course has historically been instrumental in helping students choose a college engineering program and field of study beyond high school. Many describe this course as physics and design work for engineering students.

Students should:

a. Definitely be taking or plan to take higher level math and science for 4 years of high school.
b. Be in the top ⅓ of their class.
c. Willing to work in teams and individually.
d. Be interested in pursuing a degree in science, technology, engineering, or mathematics.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Required: Students should be on a 4-year math/science track.

Prerequisite Courses: Intro to Engineering Design with a C or better. Geometry.

Applies toward graduation requirements of: 1 Career Technical Education credit

Note: Juniors and seniors who have not taken Intro to Engineering Design (IED) may be eligible for this course if they meet the requirements above. Please consult with instructor for consideration.

PLTW

Aerospace Engineering	**1 Credit**	**10, 11, 12**
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: This course propels students' learning in the fundamentals of flight and rocketry. As they explore the physics of flight, students bring the concepts to life by designing an airfoil, propulsion system and rockets. Students will participate in the NASA HUNCH Design and Prototyping project. This project will allow them the opportunity to innovate a product utilizing the Engineering Design Process. Students will culminate their project with a presentation of it to NASA Engineers and Astronauts.

- ➢ Students should definitely be taking or plan to take higher level math and science for 4 years of high school
- ➢ Students should be in the top 1/3 of their class. Students should be interested in pursuing a degree in science, math, technology or engineering. Other important traits are: interested in computers and are self-motivated.

Essential Requirements:

- Students should have an interest in aerospace and flight in general
- Students need to understand the scientific process, engineering problem solving and application of technology

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Required: Students should be on a 4-year math track.

Prerequisite Courses: Requires a grade of "C" or higher in Intro to Engineering Design

Applies toward graduation requirements of: 1 Career Technical Education credit

PLTW Digital Electronics - DE	**1 Credit**	**10, 11, 12**
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: Digital Electronics is commonly a required college course for any student pursuing a degree in mechanical, electrical, computer, aerospace, biomedical, or industrial engineering.

Students learn soldering and prototyping of circuit boards. They then advance to digital and Boolean logic, basic programming of programmable logic controllers, units and measurement, and circuit design. It is a very project oriented course with math and logic applications.

Highly recommended for those students considering electrical, mechanical, aerospace, industrial, and even chemical engineering studies in college.

Students should:

a. Definitely be taking or plan to take higher level math and science for 4 years of high school
b. Be in the top ⅓ of their class
c. Willing to work in teams and individually
d. Be interested in pursuing a degree in science, technology, engineering or mathematics

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Required: Students should definitely be on a 4-year math/science track.

Prerequisite Courses: Intro to Engineering Design with a C or better. Geometry.

Applies toward graduation requirements of: 1 Career Technical Education credit

Note: Juniors and seniors who have not taken Intro to Engineering Design (IED) may be eligible for this course if they meet the requirements listed above. Please consult with instructor for consideration.

PLTW Engineering Capstone	1 Credit	11, 12
Course Name	**Semester 1 & 2 (Full Year Course)**	**Grade Level**

Course Description: The Capstone class is the culmination of the Engineering Design, Digital Electronics, Principles of Engineering, and Aerospace Engineering course work. It offers the opportunity for the students to work in design teams to solve problems and meet needs by relying upon their prior knowledge, experience, and practice developed in previous engineering courses. Given that students have diverse strengths, backgrounds, and interests, i.e. computer programming, math, electronics, physics, design, organization, etc., they will be teamed based upon expertise to create diversity within the groups much like the dynamic found in real engineering design teams. Teams will expand upon processes developed in their earlier engineering courses, i.e. brainstorming, field observation and research, professional contact and interviews, documentation, mock-ups, 3D modeling, prototyping, field testing, process recording, proposal communication, etc.

Students should definitely be taking or plan to take higher level math and science for 4 years of high school. Students should be in the top 1/3 of their class. Students should be interested in pursuing a college degree in Engineering, Science, Mathematics, or Technology.

Essential Requirements:

- Apply math and science to the engineering field
- Understand the problem solving process, manufacturing process and application of technology
- Understand technology and its effects on society
- Understanding of the engineering design process
- Problem solving, organization, and computer skills
- Willing to work in teams and individually

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Required: Students should be on a 4-year math track.

Prerequisite Courses: Requires a grade of “C” or higher in two of the following: Introduction to Engineering Design, Principles of Engineering, Digital Electronics, and Aerospace Engineering and/or Instructor approval.

Applies toward graduation requirements of: 1 Career Technical Education credit
***Note: Juniors and Seniors who have not taken Intro to Engineering Design (IED) may be eligible for this course if they meet the requirements listed above. Please consult with instructor for consideration.

PLTW Game Design and Development	Credit ½	10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: GDD introduces students to game design and development through a variety of industry-standard tools. Students learn fundamental game design elements such as goals, rules, advancement, and feedback. As students master the basics of game design, they learn 3D modeling with Blender, animation, pen and paper design, and 2D design in the Unity Game Engine.

Other key elements to be taught:

- Blender 3D
- C++/C#
- Unity/Unreal game engine

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

ONE HOUR CLASS

Prerequisite Courses: None
Applies toward graduation requirements of: 1 Career Technical Education credit

PLTW Computer Science Essentials	Credit 1 3 Credits @ City College MSU Billings	9, 10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Collaborate to solve problems and create value for others through innovation and creativity. Through programming mobile apps, self-driving vehicles, and authentic day-to-day solutions, students learn computational thinking skills and put their designs into practice. Whether these are your first steps in computer science, or a continuation of your journey, Computer Science Essentials will give you confidence to succeed today and beyond. Students will learn the Python programming language. There is a Dual Credit option with City College for CSCI 100.

Dual Credit Option: High school students have the opportunity to earn both high school and college credit through City College MSU Billings by enrolling in CSCI 100: Intro to Programming.

Essential Requirements:

- Teach students to operate and use computer and information technology emphasizing their roles as tools to communicate more effectively, conduct research more efficiently, and increase productivity.
- Understand the legal and ethical issues involved with computer technology and use.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

TWO HOUR BLOCK

Prerequisite Courses: None
Applies toward graduation requirements of: 1 Career Technical Education credit

PLTW Computer Science A	Credit 1	9, 10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description: Fundamental topics in this course include the design and development of solutions that use control-structures, data structures, and object-oriented programming using the Java programming language, the analysis of potential solutions, and the ethical and social implications of computing systems. Students cultivate their understanding of coding through analyzing, writing, and testing code as they explore concepts like modularity, variables, and control structures. CSA is designed with alignment to the College Board Computer Science A framework.

Essential Requirements:

- Teach students to operate and use computer and information technology emphasizing their roles as tools to communicate more effectively, conduct research more efficiently, and increase productivity.
- Understand the legal and ethical issues involved with computer technology and use.
- CSA is designed with the alignment to the College Board Computer Science A framework.

Students may earn AP credit as well as professional certificates after completion of this course.

In the event of over enrollment, **first criteria** for consideration shall be current daily attendance. Attendance is required and documented.

TWO HOUR BLOCK

Prerequisite Courses: PLTW Computer Science Essentials
Applies toward Graduation Requirements of: 1 Career Technical Education credit

PLTW Cybersecurity	Credit 1	10, 11, 12
Course Name	**Semester 1 or 2**	**Grade Level**

Course Description : Cybersecurity courses introduce students to the concepts of cybersecurity. These courses provide students with the knowledge and skills to assess cyber risks to computers, networks, and software programs. Students will learn how to create solutions to mitigate cybersecurity risks. These courses may also cover the legal environment and ethical computing behavior related to cybersecurity.

PLTW Cybersecurity gives students a broad exposure to the many aspects of digital and information security, while encouraging socially responsible choices and ethical behavior. It inspires algorithmic thinking, computational thinking, and especially, “outside-the-box” thinking. Students explore the many educational and career paths available to cybersecurity experts, as well as other careers that comprise the field of information security.

TWO HOUR BLOCK

Prerequisite Courses: Computer Science Essentials
Applies toward graduation requirements of: 7 Elective credits