

DAKOTA VALLEY HIGH SCHOOL

COURSE GUIDE

2024-2025



DAKOTA VALLEY HIGH SCHOOL

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Introduction

This course guide contains many topics of interest to you. It includes graduation requirements, course descriptions, and enrollment guidelines.

Your counselor, principal and teachers are excellent resources regarding courses. Please consult them, your parents and others who are interested in helping you make plans for your future. Dakota Valley staff are committed to working closely with students and parents.

District Mission

Preparing every learner to engage fully and competitively in education to accomplish exemplary success and elevated experiences in life.

Notice of Non-Discrimination

Equal opportunity in programs and activities shall be provided to all students in the Dakota Valley Community School District regardless of race, creed, sex, national origin, marital status, or disability as required by Title II, Title VI, Title XI, Section 504 of the Rehabilitation Act of 1973, and the American Disabilities Act.

Guidelines for Enrollment

- All students in grades 9-12 must be enrolled in seven courses per semester except the last semester of the 12th grade year. Seniors do not have to take seven courses in the second semester if they have enough credits to graduate. However, all seniors will be required to take at least four classes in the second semester.
- To be eligible to participate in extracurricular activities a student must pass four academic classes the previous semester and pass at least six classes at each grading period (progress report, quarter, semester).
- Students wishing to drop or add a class must use the schedule change form. The student will be notified via email or in person if their request was granted. Students will be allowed to drop or add a class through the third school day of the semester. Any class dropped after the third day and before the end of the 1st/3rd quarter will be recorded on the report card and the transcript as a withdrawal grade (W). Any class dropped during 2nd/4th quarter will be recorded on the report card and transcript as a failing grade (F). Students withdrawing from a course will have 'in progress' grade used at the next eligibility period. Students removed from classes for disciplinary reasons will receive a withdrawal grade (W). The administration, school counselor, parent(s)/guardian(s), teacher and student must mutually agree upon any exceptions to this policy.

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Dakota Valley High School Graduation Requirements

The below outline is the Dakota Valley High School Graduation Requirements.

	Dakota Valley Diploma	Advanced Endorsement	Advanced Career Endorsement	Advanced Honors Endorsement No grade lower than a C can be transcribed
ELA	Writing (1 unit) Speech (.5 unit) Lit (1 unit including .5 unit Am. Lit) ELA Elective (1.5 unit) Total Credits Needed = 4	Writing (1 unit) Speech (.5 unit) Lit (1 unit including .5 unit Am. Lit) ELA Elective (1.5 unit) Total Credits Needed = 4	Writing (1 unit) Speech (.5 unit) Lit (1 unit including .5 unit Am. Lit) ELA Elective (1.5 unit) Total Credits Needed = 4	Writing (1.5 unit) Speech (.5 unit) Lit (1.5 unit including .5 Am. Lit) ELA Elective (.5 unit) Total Credits Needed= 4
Math	Algebra I (1 unit) Math Electives (2 units) Total Credits Needed = 3	Algebra I (1 unit) Geometry (1 unit) Algebra II (1 unit) Total Credits Needed = 3	Algebra I (1 unit) Math Electives (2 units) Total Credits Needed = 3	Algebra I (1 unit) Geometry (1 unit) Algebra II (1 unit) Advanced Math Course (1 unit) Total Credits Needed = 4
Science	Biology (1 unit) ^Science Elective (2 units) Total Credits Needed = 3	Biology (1 unit) Lab Sciences Electives (2 units) Total Credits Needed = 3	Biology (1 unit) ^Science Elective (2 units) Total Credits Needed = 3	Biology (1 unit) Any Physical Science (1 unit) Chemistry or Physics (1 unit) Science Elective (1 unit) Total Credits Needed = 4
Social Science	US History (1 unit) Government (.5 unit) Social Science Elective (1.5 units) Total Credits Needed = 3	US History (1 unit) Government (.5 unit) Social Studies Elective (1.5 unit) Total Credits Needed = 3	US History (1 unit) Government (.5 unit) Social Studies Elective (1.5 unit) Total Credits Needed = 3	US History (1 unit) Government (.5 unit) Geography (.5 unit) World History (.5 unit) Social Studies Elective (.5 unit) Total Credits Needed = 3
CTE World Language	1 CTE unit or World Language unit or Capstone unit Total Credits Needed = 1	1 Unit CTE or World Language Total Credits Needed = 1	2 Units of CTE in the Same Cluster AND Industry-Recognized Credential or NCRC Silver or Higher Total Credits Needed = 2	2 Units of the follow or combination of the 2: Approved CTE Courses or Modern Language or Classical Language (ASL) Total Credits Needed = 2
Health/PE	Health / PE Total Credits Needed = 1			
Fine Arts	Fine Art Elective (1 unit) Total Credits Needed = 1	Fine Art Elective (1 unit) Total Credits Needed = 1	Fine Art Elective (1 unit) Total Credits Needed = 1	Fine Art Elective (1 unit) Total Credits Needed = 1

Personal Finance or Economics	Total Credits Needed = .5	Total Credits Needed = .5	Total Credits Needed = .5	Total Credits Needed = .5
Electives	Additional Elective Courses Total Credits Needed=6.5	Additional Elective Courses Total Credits Needed = 6.5	Additional Elective Courses Total Credits Needed = 5.5	Additional Elective Courses Total Credits Needed =3.5
Total Credits	23 Total Credits	23 Total Credits	23 Total Credits	23 Total Credits
<i>Additional Information</i>				
Objective(s)	Workforce	2 or 4 year postsecondary Military	2 or 4 year postsecondary Military	4+ year postsecondary Military
Suggested Assessments	NCRC	ACT ASVAB	NCRC and/or ACT ASVAB	ACT and/or SAT ASVAB
Scholarships			Build Dakota Scholarship	SD Opportunity Scholarship

^For the General Diploma and Advanced Career Endorsement, a state approved advanced computer science course may be substituted for 1 unit of science (not including biology).

Notes: The suggested math pathway to prepare for the ACT test is at minimum, the math courses found in Advanced and Advanced Honors Endorsements.

Dakota Valley High School Grading Scale

A+	99-100	B+	90-91	C+	81-82	D+	72-73
A	94-98	B	85-89	C	76-80	D	67-71
A-	92-93	B-	83-84	C-	74-75	D-	65-66

Special Education Program

Special Education programs at the high school utilize an Individual Education Plan (IEP) to assist students with special needs. Career classes at the high school meet these specialized needs on an individual basis. Contact an administrator for more information.

NOTE: The courses in this course guide are offered every year. Half-credit courses may not be offered every semester, but they are offered every year. Use of the course guide, completion of your personal learning plan, and continual review of your PLP will ensure that you remain on track to graduate on time. Remember that you can visit with your principal, ass't principal, counselor, and any staff member if you need assistance.

Dakota Valley Classes for Graduation

Students must successfully complete each grade level and complete all the required courses of study prior to graduation as determined by the South Dakota State Board of Education and the Dakota Valley School Board.

1 CREDIT = 2 SEMESTERS

TOTAL CREDITS FOR GRADUATION	23 CREDITS
LANGUAGE ARTS	4 CREDITS
1 credit—Freshmen English/Speech	
1 credit—Sophomore Literature/Sophomore Writing	
1 credit—American Literature/Creative Writing	
1 credit—Senior English or AP Literature & Composition	
MATHEMATICS	3 CREDITS
1 credit—Algebra 1	
1 credit—Geometry	
1 credit—Algebra 2	
SCIENCE	3 CREDITS
1 credit—Physical Science	
1 credit—Biology	
1 credit—Science Elective	
SOCIAL STUDIES	3 CREDITS
1 credit—World Geography/World History	
1 credit—American History	
.5 credit—American Government	
.5 credit—Social Studies Elective (Psychology, Modern America, Sociology)	
FINE ARTS	1 CREDIT
PHYSICAL EDUCATION	.5 CREDIT
BUSINESS EDUCATION	.5 CREDIT
APPROVED CTE or FOREIGN LANGUAGE COURSE	1 CREDIT
HEALTH	.5 CREDIT
ELECTIVES	6.5 CREDITS

REGENT SCHOLAR REQUIREMENTS

In order to be nominated for a Regents Diploma, a graduating senior from a South Dakota high school must have completed all high school courses listed below with no final grade below a “C” and an overall grade point average of a “B” (3.0 on a 4.0 scale). The Diploma must be requested by the high school’s administrator.

LANGUAGE ARTS	4 CREDITS
MATHEMATICS	4 CREDITS
Must include Algebra and higher (Geometry, Algebra II, Trig & Pre-Calculus, Calculus)	
SCIENCE	4 CREDITS
Must include 3 credits of approved laboratory science (Physical Science, Biology, Environmental Science, Chemistry, Physics, Advanced Biology)	
SOCIAL STUDIES	3 CREDITS
FINE ARTS	1 CREDIT
FOREIGN LANGUAGE or CTE	2 CREDITS
BUSINESS EDUCATION	0.5 CREDITS
PHYSICAL EDUCATION	0.5 CREDITS
HEALTH	0.5 CREDITS

South Dakota Opportunity Scholarship Requirements

The South Dakota Legislature established requirements that all South Dakota high school graduates must meet in order to establish their initial eligibility in the Opportunity Scholarship program. These requirements specify that a recipient must:

1. Be a resident of South Dakota at time of high school graduation.
2. Have an ACT composite score of 24 or higher before the beginning of post-secondary education.
3. Complete high school course requirements with no final grade below a “C” and a cumulative GPA of 3.0 on a 4.0 scale prior to graduation.
 - a. English—4
 - b. Math—4
 - c. Science—4
 - d. Social Studies—3
 - e. Fine Arts—1
 - f. Foreign Language and/or CTE—2
 - g. PE--.5
 - h. Business Education--.5
 - i. Health--.5
4. Effective for those students entering into postsecondary education for the first time on or after August 2013, the curriculum requirements specified in section 3 above are not required for any student who has received a composite score of at least 28 and meets the ACT college readiness benchmarks scores equaling or exceeding 18 for English, 21 for Reading, 22 for Math, and 24 for Science
5. Attend a university, college or technical school accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools and that provides instruction from a campus located in South Dakota.
6. Enter into the program within 5 years of high school graduation or within 1 year of the student’s release from active duty military service.

BUSINESS EDUCATION

0.5 credit required

Course Name	Course Code	Credit	Prerequisite	Grade
Personal Finance	SS220	0.5	None	11-12

PERSONAL FINANCE (1 semester)

Credit: 0.5 **Elective/Required:** Required **Grade Level:** 11-12

Course Description: Focuses on the students' roles as a citizen, student, family member, consumer, and active participant in the business world. Discovering new ways to maximize earning potential, develop strategies for managing resources, explore skills for the wise use of credit, and gain insight into different ways of investing money.

CAREER & TECHNICAL EDUCATION COURSES

1 credit required of CTE OR Foreign Language

BUSINESS

Course Name	Course Code	Credit	Prerequisite	Grade
Introduction to Business	BE099	0.5	None	9-10
Accounting I	BE111	0.5	Intro to Business	10-12
Accounting II	BE112	0.5	Accounting I	10-12
Business Law	BE100	0.5	Intro to Business	9-12
Entrepreneurship	BE130	0.5	None	11-12

INTRODUCTION TO BUSINESS (1 semester)

Credit: 0.5 **Elective/Required:** Elective **Grade Level:** 9-10

Course Description: Introduction to Business teaches students about how businesses work on local, national, and international scales. It covers a wide range of topics including how economies affect businesses, managing finances, advertising, leadership skills, and more. Students will learn about the important aspects of running a business and develop skills needed to be successful, like problem-solving and having the right attitude. It provides students with the entry-level skills needed to explore other business concepts in future classes.

ACCOUNTING I (1 semester)

Credit: 0.5 **Elective/Required:** Elective **Grade Level:** 9-12

Prerequisite: Introduction to Business

Course Description: Accounting involves maintaining accounting records for individuals or a business. The course includes the planning of how to record, how to summarize, and how to analyze financial records to further improve a financial situation. This course develops an understanding of the steps in accounting cycle, and understanding of accounting system, and the managerial use of accounting problems in the textbook. Also, automated computer accounting is used to solve accounting problems in two accounting simulations.

ACCOUNTING II (1 semester)

Credit: 0.5 **Elective/Required:** Elective **Grade Level:** 10-12

Prerequisite: Accounting I

Course Description: Accounting II is an elective course intended for students with determined career objectives in the field of business or in the accounting profession. This second-year course is designed for students who want: (1) to become accounting clerks upon graduation from high school; (2) to obtain the accounting skills necessary to advance to the level of bookkeeper following experience as an accounting clerk; (3) to go on to college and major in accounting or some phase of business; or (4) to broaden and improve their knowledge, understanding, and application of accounting principles. At this level, the complete accounting cycle is mastered, and students learn more advanced, complex accounting principles. Using manual and computer skills, students perform accounting tasks for merchandising businesses organized as partnerships and corporations.

BUSINESS LAW (1 semester)**Credit:** 0.5 **Elective/Required:** Elective **Grade Level:** 9-12**Prerequisite:** Introduction to Business**Course Description:** Business Law traces a brief historical development of law and covers procedures followed in both the state and federal court systems. This course includes the study of law of contracts, employment contracts, employee protection and equal opportunity laws, employment practices and duties of employment, borrowing money and buying on credit, writing checks, starting a business, buying property, types of insurance, and different regulatory agencies.**ENTREPRENEURSHIP** (1 semester)**Credit:** 0.5 **Elective/Required:** Elective **Grade level:** 11-12**Course Description:** Students will learn how to be an entrepreneur, a person who owns a business enterprise. Simulations and hands-on applications will be used to learn about the risks and benefits of business ownership. The focus will be on developing business plans related to the interests of the students.**FAMILY & CONSUMER SCIENCE**

Course Name	Course Code	Credit	Prerequisite	Grade
Child Development	CE126	0.5	None	9-12
Fashion Design	CE133	0.5	None	9-12
Introduction to Food Concepts	CE101	0.5	None	9-12
Introduction to Culinary Arts I	CE131	0.5	Intro to Food Concepts	9-12
Introduction to Culinary Arts II	CE132	0.5	Intro to Culinary Arts I	9-12

CHILD DEVELOPMENT (1 semester)**Credit:** 0.5 **Elective/Required:** Elective **Grade Level:** 9-12**Course Description:** Students will study prenatal care, infants, and toddlers. They will discover the child's developmental needs and interests while learning how to be caregivers, teachers, and parents. They will observe and assist in the healthy development of this age range. Discussion topics include decision making process, conception and contraception, the birth process; and the physical, intellectual, emotional, and social development of newborns, infants, and toddlers.**FASHION DESIGN** (1 semester)**Credit:** 0.5 **Elective/Required:** Elective **Grade Level:** 9-12**Course Description:** This course is an individualized program for students interested in sewing for themselves and others. They will select projects suitable to their ability and interests. Students will work at their own pace as projects and timelines will be negotiated and contracted. Careers in fashion and the fashion industry will be explored.**INTRODUCTION TO FOOD CONCEPTS** (1 semester)**Credit:** 0.5 **Elective/Required:** Elective **Grade Level:** 9-12**Course Description:** Introduction to Food Concepts will explore safe and effective basic food preparation. Students apply skills in planning and preparing meals, properly using equipment and utensils, and gain a foundational understanding of the nutritional needs and requirements for healthy living.**INTRODUCTION TO CULINARY ARTS I** (1 semester)**Credit:** 0.5 **Elective/Required:** Elective **Grade Level:** 9-12**Prerequisite:** Introduction to Food Concepts**Course Description:** This is a one semester course that views food through the lens of the restaurant industry. Students will study the basic cooking techniques, knife skills and food preparation methods needed to be successful in a professional setting. They will have the opportunity to practice these skills in laboratory experiences. Topics covered may include: food safety and sanitation; standardized recipes and measurement; meat and poultry; eggs; soups and stews; sandwiches and pizza; salads and dressings; and pies, tarts, and candies.**INTRODUCTION TO CULINARY ARTS II** (1 semester)**Credit:** 0.5 **Elective/Required:** Elective **Grade Level:** 9-12 **Prerequisite:** Culinary Arts I**Course Description:** In this course we will build on the knowledge learned in Intro to Culinary Arts. Students will learn to prepare breakfast foods, desserts and baked products, poultry & seafood, global cuisines, and advanced plating and presentation techniques in labs. Other topics include business practices in the hospitality industry, nutrition, menu planning and marketing.

INDUSTRIAL ARTS

Course Name	Course Code	Credit	Prerequisite	Grade
Introduction to Drafting	IE152F	0.5	None	9-12
Mechanical Drawing/3D Modeling	IE152S	0.5	Drafting Recommended	10-12
Welding Technology	IE165	0.5	None	9-12
Introduction to SMAW	WEL147	0.5	None	10-12
Introduction to GMAW	WEL423	0.5	SMAW	10-12
Woods I	IE153	0.5	None	9-12
Woods II	IE154	0.5	Woods I	9-12
Woods III	IE155	0.5	Woods II	10-12

INTRODUCTION TO DRAFTING (1 semester)

Credit: 0.5 **Elective/Required:** Elective **Grade Level:** 9-12

Course Description: This course will have a strong emphasis on geometric construction. This course will also cover the drafting basics like orthographic projection (top, front and right-side), sectional views, auxiliary views, dimensioning, isometric (3D) drawings, and drafting standards. This course is great for those students who like to work with their hands, using computers, drawing or who are very detail oriented. This course is also a great option for those students who have career aspirations in design, engineering, architecture or any technical field.

MECHANICAL DRAWING AND 3D MODELING (1 semester)

Credit: 0.5 **Elective/Required:** Elective **Grade Level:** 9-12 **Prerequisite:** Drafting

Course Description: In this course the students will be creating, assembling, testing, and portraying their creations into orthographic drawings using a 3D modeling program called SolidWorks. Students will be introduced to tools and methods used by a skilled draftsman and engineers. This is a perfect course for those who are interested in how things are put together, engineering, creating parts, or working with computers.

WELDING TECHNOLOGY (1 semester)

Credit: 0.5 **Elective/Required:** Elective **Grade Level:** 9-12

Course Description: Students in this course will learn the basic welding techniques for SMAW (6010, 6013, and 7018), GMAW, and various welding cutting processes. Students will be able to produce various weld joints in the flat and horizontal positions. Students will learn how to safely operate all the machines, cut and prepare the metal for welding, and welding various joints. Welding is a great skill to have not only for those who have career interests in manufacturing, but for others who can use it as a hobby, or to be able to fix metal objects around their homes.

INTRODUCTION TO SMAW (1 semester)- Dual Credit through WIT

Credit: 0.5 **Elective/Required:** Elective **Grade Level:** 10-12

Course Description: This course is designed for students to prepare for the AWS Certification. A combined lecture and lab course, students study safety, heat settings, polarity, and the proper selection of electrodes in the arc welding process. Topics include welding on carbon steel plate using visual and destructive methods of determining weld quality to AWS Standards.

INTRODUCTION TO GMAW (1 semester)- Dual Credit through WIT

Credit: 0.5 **Elective/Required:** Elective **Grade Level:** 10-12 **Prerequisite:** SMAW

Course Description: This course combines lecture and lab activities to present the Gas Metal Arc Welding (MIG) process used extensively by industry. It emphasizes hands-on applications, metal transfer concepts, GMAW equipment, and safety.

WOODS I (1 semester)**Credit:** 0.5 **Elective/Required:** Elective **Grade Level:** 9-12

Course Description: In this class students will be learning how to work with tools safely. The students will learn how to properly use stationary power tools (ex. Table saw, miter saw) as well as hand tools (ex. Router, orbital sander). Students will learn all the steps it takes to complete a project from cutting the first board to putting the last coat of polyurethane on. Students who wish to take this class might have an interest in working with their hands, constructing, using tools, or eager to learn a new skill set. Students will be creating two projects over the course of the semester. Students who take this class will have to purchase the materials for their individual projects. There are two required projects and the typical costs of these two projects are between \$60-\$80 for both.

WOODS II (1 semester)**Credit:** 0.5 **Elective/Required:** Elective **Grade Level:** 9-12 **Prerequisite:** Woods I

Course Description: Woods II builds on what students previously learned in Woods I. Woods II will emphasize the design process that it takes to complete a project. The students will be making their own plans for a project they wish to construct. The only requirement for the project is that they must incorporate a door or drawer into their plans for the project. With these skills students learned from both Woods I and Woods II, students will be able to pursue various careers in construction and also will be able to fix many little household problems. Students who take this class will have to purchase the materials for their individual projects. Projects vary by student interest, but typical costs are between \$50 and \$200. The price varies due to the size and wood the students make their project out of.

WOODS III (1 semester)**Credit:** 0.5 **Elective/Required:** Elective **Grade Level:** 10-12 **Prerequisite:** Woods II

Course Description: Woods III is a continuation of the Woods II course. This course is intended for those who choose to build a project that will take longer than one semester, or those who want to explore woodworking further. Stationary, and portable power tools are the focus of this area of instruction, as well as how to use them safely. The class is intended to broaden the scope of understanding of typical woodworking, and joinery is stressed. Each student will leave with a portfolio that details the construction of their project from start to finish. Students who take this class will have to purchase the materials for their individual projects. Projects vary by student interest, but typical costs range between \$50 and \$200. The price varies due to the size and species of wood the students choose to make their project out of.

STEM/ INFORMATION TECHNOLOGY

Course Name	Course Code	Credit	Prerequisite	Grade
Audiovisual Design (Video Production)	CS133	0.5	None	9-12
Computer Programming I	CS180	0.5	None	9-12
Computer Programming II	CS181	0.5	Computer Programming I	9-12
Graphic Design	CS176	0.5	None	9-12
Mechatronics/Robotics	CS145	0.5	None	9-12
Advanced Mechatronics/Robotics	CS146	0.5	Mechatronics/Robotics	9-12
Mobile Apps IT	CS150	0.5	None	9-12
Video Game Design	CS185	0.5	None	9-12
Web Publishing and Design	CS177	0.5	None	9-12
Web Animation (Web Publishing II)	CS179	0.5	None	9-12

AUDIOVISUAL DESIGN (Video Production) (1 semester)**Credit:** 0.5 **Elective/Required:** Elective **Grade Level:** 9-12

Course Description: The class will work with digital video cameras and video editing equipment to produce digital video projects. Students will learn how to create storyboards, which they will follow when they crop and trim footage in an effort to produce a professional product. They will also learn how to add voiceovers; music, sound effects, transitions and use special effects to enhance the finished product.

COMPUTER PROGRAMMING I (1 semester)**Credit:** 0.5 **Elective/Required:** Elective **Grade Level:** 9-12

Course Description: This course is intended to give students a fun, hands-on introduction to object-oriented programming concepts using the Alice programming language.

COMPUTER PROGRAMMING II (1 semester)**Credit:** 0.5 **Elective/Required:** Elective **Grade Level:** 9-12

Course Description: Take a deep dive into the fundamentals of programming concepts and learn **text-based coding using Python**. Computer Programming II is predicated on the notion that learning about programming and computer science should be fun and engaging. In this course, we expose students to graphics-based problem solving because it is visually engaging, allows for multiple correct solutions, and provides visual cues when a solution goes awry.

GRAPHIC DESIGN (1 semester)**Credit:** 0.5 **Elective/Required:** Elective **Grade Level:** 9-12

Course Description: Graphic Design Fundamentals is an introductory course designed to expose students to the areas of Graphic Design using adobe Photoshop and Illustrator. This course will help students examine the various areas in design and visual arts and allow students to develop, nurture and strengthen their creative and artistic talents. Students will be engaged in 2D and 3D fine art, digital photography, and portfolio development. This hands-on program will help students develop and strengthen their creative, communication, research, problem-solving and conceptualization skills.

MECHATRONICS/ROBOTICS: Programming (1 semester)**Credit:** 0.5 **Elective/Required:** Elective **Grade Level:** 9-12

Course Description: This course will use a hands on approach to introduce the basic concepts in robotics. The students will experiment with levers, pulleys, gears, gear ratios and basic locomotion. They will learn how to build basic robots using the LEGO Mindstorms' robotic kit. They will also learn basic programming and use it to control their robots. The goal of Robotics I is to teach the students the basic physical science applications, technology, engineering and math fundamentals.

ADVANCED MECHATRONICS/ROBOTICS: Engineering (1 semester)**Credit:** 0.5 **Elective/Required:** Elective **Grade Level:** 9-12 **Prerequisite:** Mechatronics

Course Description: This course will use collaborative, hands on approach to introduce advanced concepts in robotics. Over the course of the semester, we will focus on building advanced robots designed to accomplish specific tasks; explore manipulators, such as forklifts, robotic arms, robotic claws, etc; and experiment with the practical use of electronic sensors, including touch, sound, distance and light. The students will broaden their knowledge of computer programming and its applications. The goal of Robotics II is to teach the students advanced physical science applications, technology, engineering, and math fundamentals.

MOBILE APPS IT (1 semester)**Credit:** 0.5 **Elective/Required:** Elective **Grade Level:** 9-12

Course Description: This project-oriented course examines the principles of mobile application design and development. Students will learn mobile application development on the Android platform. Mobile App:IT will expose students to a wide range of concepts and technical skills in six separate areas that will greatly help them succeed in the future. The skill areas include: Technical Skill; Creative, innovation and critical thinking; Communication and collaboration; Digital researching tools; Engineering, physics and math; Career, STEM and post-secondary education options

VIDEO GAME DESIGN (1 semester)**Credit:** 0.5 **Elective/Required:** Elective **Grade Level:** 9-12

Course Description: This course will be a hands-on introduction to the process, design and creation of computer games and the gaming industry. Students will create a narrative for a game, storyboards to describe characters and interaction, analyze and describe the target market and platform and create a formal game design proposal. Students will develop their game designs through a prototype development cycle leading to a complete and user tested product using a development system that does not require traditional programming.

WEB PUBLISHING AND DESIGN (1 semester)**Credit:** 0.5 **Elective/Required:** Elective **Grade Level:** 9-12

Course Description: Our Web Design course teaches students how to use HTML5 and CSS3 to build websites from the ground up. Along the way they will learn critical STEM skills, develop confidence, and build a college and career ready portfolio along the way.

WEB ANIMATION (Web Publishing II) (1 semester)**Credit:** 0.5 **Elective/Required:** Elective **Grade Level:** 9-12

Course Description: Animation for the Web is simply a fun way to introduce the power of Adobe's Flash and the complimentary STEM and STEAM career pathways of animation. Understanding animation technology will add to your arsenal of marketable skills.

FINE ARTS COURSES

1 credit required

Course Name	Course Code	Credit	Prerequisite	Grade
Art I	FA101	0.5	None	9-12
Art II	FA102	0.5	Art I	9-12
Art III	FA103	0.5	Art II	10-12
Art IV	FA104	0.5	Art III	10-12
Art V	FA105	0.5	Art IV	11-12
3D Design I	FA106	0.5	None	9-12
3D Design II	FA107	0.5	3D Design I	9-12
Band	FA120	1	Playing knowledge of a band instrument	9-12
Choir	FA121	1	None	9-12
Music Appreciation I	FA140F	0.5	None	9-12
Music Appreciation II	FA140S	0.5	None	9-12

ART I (1 semester)

Credit: 0.5 **Elective/Required:** Elective **Grade Level:** 9-12

Course Description: This course is designed as a basic introduction to the visual arts. The Elements of Design are studied and explored. Exercises are created for students to apply the use of technique and skill to the Element in focus.

ART II (1 semester)

Credit: 0.5 **Elective/Required:** Elective **Grade Level:** 9-12 **Prerequisite:** Art I

Course Description: This course is designed as a secondary level to the visual arts. The Principles of Design are studied and explored. Exercises are created that develop a deeper sense of technique and skill, building on Art I.

ART III (1 semester)

Credit: 0.5 **Elective/Required:** Elective **Grade Level:** 10-12 **Prerequisite:** Art II

Course Description: Using the Elements and Principles of Design as previously learned, students will learn compositional skills as they apply a mature understanding of design to their art. Exercises build upon foundational skills learned to create compositions that are engaging technically. Master artists are investigated and studied for style and technique application.

ART IV (1 semester)

Credit: 0.5 **Elective/Required:** Elective **Grade Level:** 10-12 **Prerequisite:** Art III

Course Description: Students will explore various media as well as continue to develop skills with a greater focus on subject matter, composition, and artistic expression. Master artists are investigated and studied for style and technique application where students can learn to create their own style of art.

ART V (1 semester)

Credit: 0.5 **Elective/Required:** Elective **Grade Level:** 11-12 **Prerequisite:** Art IV

Course Description: Students will work at an independent level with the art instructor to create a personalized curriculum based on their artistic goals (ex. Portfolio development for scholarship or college entrance, skill refinement, technique exploration...)

3D Design I (1 semester)

Credit: 0.5 **Elective/Required:** Elective **Grade Level:** 9-12

Course Description: This class is for those who enjoy working in the 3rd dimension and getting their hands dirty. Exploration of clay and sculptural materials are studied as students learn the history of this ancient and versatile art form. *Note- if you do not like being dirty, this is not the course for you.*

3D Design II (1 semester)

Credit: 0.5 **Elective/Required:** Elective **Grade Level:** 9-12 **Prerequisite:** 3D Design

Course Description: This class is for those who would like to further their 3D technical skills. Exploration of clay and sculptural materials are studied as students learn the modern use of clay and sculptural art forms. *Note- if you do not like being dirty, this is not the course for you.*

BAND (2 semesters)**Credit:** 1 **Elective/Required:** Elective **Grade Level:** 9-12**Prerequisite:** Playing knowledge of a band instrument**Course Description:** Band includes many aspects of instrumental music. The main core of the class concentrates on concert band and the study of concert band literature. Other aspects of band include marching band, pep band, solo and ensemble work, and the opportunity to audition for All-State Band and a number of honor bands. The various ensembles perform a total of twenty-five to thirty times a year. Lessons are available at no cost to the student.**CHOIR** (2 semesters)**Credit:** 1 **Elective/Required:** Elective **Grade Level:** 9-12**Course Description:** Students should be able to demonstrate matched pitch voices qualities. Members of the chorus may audition for All-State, Solo, and Ensemble Contest. The students in Large Group Contest will participate in three concerts per year. Repertoire will be selected from a variety of choral literature. The purpose of this course is to provide students will advanced vocal music instruction and performance experience.**Students may take and earn credit for Band and/or Choir all four years***MUSIC APPRECIATION I** (1 semester)**Credit:** 0.5 **Elective/Required:** Elective **Grade Level:** 9-12**Course Description:** Students will explore their personal connection to music and learn about music history, genres, world music and instruments, rhythm note reading, bucket drumming and composition.**MUSIC APPRECIATION II** (1 semester)**Credit:** 0.5 **Elective/Required:** Elective **Grade Level:** 9-12**Course Description:** Students will learn about ukeleles, note reading literacy, basic string skills, chords, and Broadway musicals.**FOREIGN LANGUAGE COURSES****1 credit required of Foreign Language *OR* CTE**

Course Name	Course Code	Credit	Prerequisite	Grade
Spanish I	FL185	1	None	9-12
Spanish II	FL186	1	Spanish I	10-12
Spanish III	FL187	1	Spanish II	11-12
Spanish IV	FL188	1	Spanish III	12

SPANISH I (2 semesters)**Credit:** 1 **Elective/Required:** Elective **Grade Level:** 9-12**Course Description:** Spanish I is an introduction to the Spanish culture and language. The students learn to converse about themselves, families, and friends in the present tense. The students will be able to discuss their activities and hobbies by conjugating regular and stem-changing verbs and be able to describe their likes/dislikes, occupations, and town among other subjects. A section on the Spanish culture accompanies each unit and they will end with an introduction of the preterit form of the Spanish past tense.**SPANISH II** (2 semesters)**Credit:** 1 **Elective/Required:** Elective **Grade Level:** 10-12 **Prerequisite:** Spanish I**Course Description:** Spanish II provides a more in-depth study of the Spanish language and culture. The students will be able to communicate much more fluently in Spanish, as this course presents more complex vocabulary, sentence structure, reflexive, preterit, and imperfect and present progressive verb tense.**SPANISH III** (2 semesters)**Credit:** 1 **Elective/Required:** Elective **Grade Level:** 11-12 **Prerequisite:** Spanish II**Course Description:** The students will continue to improve their speaking ability in groups and also by speaking spontaneously. More stress will be placed on writing. Reading skills are developed by using supplementary materials..**SPANISH IV** (2 semesters)**Credit:** 1 **Elective/Required:** Elective **Grade Level:** 12 **Prerequisite:** Spanish III**Course Description:** The students will continue to improve their speaking ability, writing ability, and reading skills. Students should be able to successfully carry on a conversation speaking Spanish.

HEALTH

0.5 credit required

Course Name	Course Code	Credit	Prerequisite	Grade
Health	PE221	0.5	None	10-12

HEALTH (1 semester)

Credit: 0.5 **Elective/Required:** Required **Grade Level:** 10-12

Course Description: This course will foster development of health related knowledge, attitudes, and skills in various areas such as community health, environmental health, family life, nutrition, physical activity, personal health practices, injury prevention and substance use and abuse.

LANGUAGE ARTS COURSES

4 credits required

Course Name	Course Code	Credit	Prerequisite	Grade
Required:				
Freshmen English	LA131	0.5	None	9
Speech	LA141	0.5	None	9
Sophomore Literature	LA134	0.5	None	10
Sophomore Writing	LA133	0.5	None	10
American Literature	LA138	0.5	None	11
Creative Writing	LA139	0.5	None	11
AP Literature & Comp.	LA144	1	B- or better in all other English courses, MAP Scores, & Teacher Recommendation	12
OR Senior English	LA142	1	None	12
Electives:				
Journalism	LA136	1	None	9-12

FRESHMEN ENGLISH (1 semester)

Credit: 0.5 **Elective/Required:** Required **Grade Level:** 9

Course Description: The purpose of this course is to strengthen and enhance personal reading and writing skills. The writing will focus on nonfiction writing, including writing a researched history paper. Reading activities will focus on reading for understanding of a variety of sources, both contemporary and classic and both fiction and non-fiction.

SPEECH (1 semester)

Credit: 0.5 **Elective/Required:** Required **Grade Level:** 9

Course Description: The ability to communicate well is essential in any successful pursuit. In this freshman level class, students will be shown the elements of effective communication from how to get over stage fright, to how to construct a powerful persuasive speech. This is a "hands-on" class which incorporates improvisation and team-building games to help students further their individual and group communication skills. Units covered include: How the Brain Works, Communication, Speaking and Listening, Intrapersonal Communication, Interpersonal Communication, Group Communication, Social-Ritual speaking, Informational Speech, Persuasive Speech, Parliamentary Procedure, Debate, and Oral Interpretation.

SOPHOMORE LITERATURE (1 semester)

Credit: 0.5 **Elective/Required:** Required **Grade Level:** 10

Course Description: This course is designed to reflect upon various forms of literature such as culturally related and classic novels. This course will focus on reflecting, discussing, and incorporating the material and vocabulary in association with the values of society.

SOPHOMORE WRITING (1 semester)

Credit: 0.5 **Elective/Required:** Required **Grade Level:** 10

Course Description: This writing course focuses on grammar and composition. The process of developing well-constructed sentences, paragraphs, and essays will be the overall focus for the semester. Various writing projects will be incorporated such as autobiographies, descriptive essays, and reaction papers. Various reading tools will be incorporated to ensure the whole language development.

AMERICAN LITERATURE (1 semester)**Credit:** 0.5 **Elective/Required:** Required **Grade Level:** 11

Course Description: American Literature is a survey of the literature that we have produced as a nation and the ideas, philosophies, and literary movements that have brought us into the twentieth century. Course contents will include reading, discussion, and writing about the works of authors of American Literature. In addition to class study of numerous novels, students will be required to write a research paper.

CREATIVE WRITING (1 semester)**Credit:** 0.5 **Elective/Required:** Required **Grade Level:** 11

Course Description: Creative Writing covers both the creative process and the writing process. The purpose of the course is to teach and allow for the application of writing skills selected from the following areas: descriptive writing, personal writing essay, drama, short story, and poetry. Class structure is a lab setting that supports the individual's writing process through independent work, peer editing, and teacher conference.

AP LITERATURE & COMPOSITION (2 semesters)**Credit:** 1 **Elective/Required:** Elective **Grade Level:** 12

Prerequisite: B- or above in all other English courses, MAP Scores, and Teacher Recommendation

Course Description: The AP English Literature course is designed to engage students in the careful reading and critical analysis of imaginative literature. Students can deepen their understanding of the way writers use language to provide both meaning and pleasure to their readers. As the reader, students should consider a work's structure, style, and themes, as well as smaller-scale elements such as the use of figurative language, imagery, symbolism, and tone.

SENIOR ENGLISH (2 semesters)**Credit:** 1 **Elective/Required:** Required **Grade Level:** 12

Course Description: This senior level class is a career/technical based English class. Students will focus on technical reading and writing that will be appropriate for the workplace at all levels. The three novels and one play included are relevant to modern American life as they deal with government and situations currently found in society.

JOURNALISM (2 semesters)**Credit:** 1 **Elective/Required:** Elective **Grade Level:** 9-12

Course Description: This two-semester class focuses on documenting the annual events of the high school through photojournalism and newswriting. After learning about journalistic ethics, newswriting, photography, and the principles of layout and design of publications, staff will construct the school's yearbook and the monthly Panther Pride newspaper.

MATHEMATICS COURSES

3 credits required

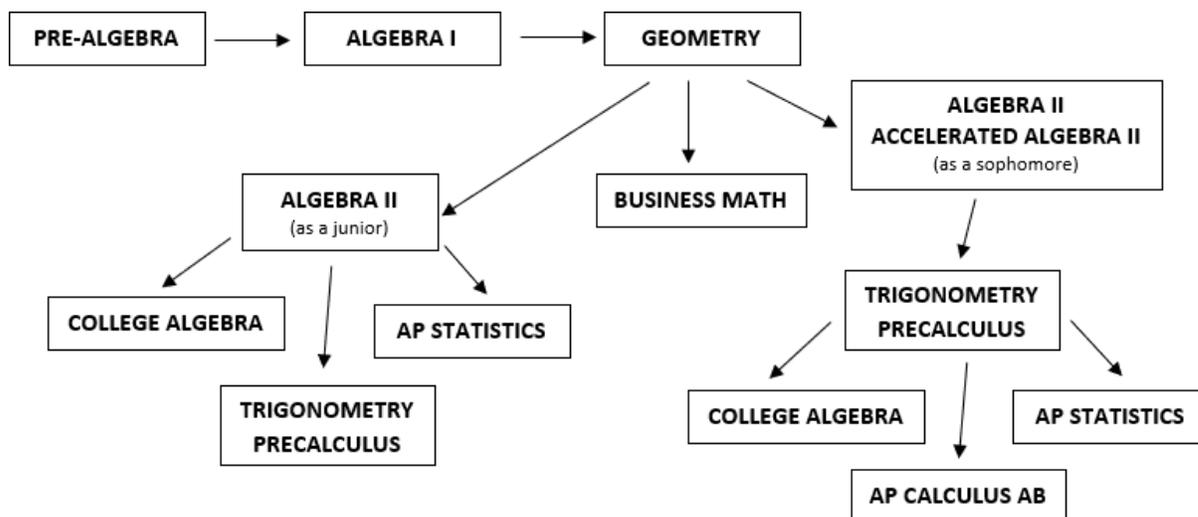
Course Name	Course Code	Credit	Prerequisite	Grade
Pre-Algebra	MA167	1	Instructor's Recommendation	9
Algebra I	MA168	1	None	9-12
Geometry	MA169	1	Algebra I	9-12
Algebra II	MA170	1	Algebra I	10-12
Accelerated Algebra II	MA185	1	Geometry (A- or above) MAP Scores Instructor's Recommendation	10
Business Math	MA175	1	Geometry Instructor's Recommendation	11-12
Trigonometry & Pre-Calculus	MA171	1	Algebra II	11-12
College Algebra	MA174	1	Algebra II (C- or above) OR Instructor Approval	12
AP Statistics	MA172	1	Algebra II (C- or above)	11-12
AP Calculus AB	MA173	1	Trigonometry/Pre-Calculus (C- or above)	11-12

*Incoming freshmen requesting Geometry: Teacher recommendation is required based upon a rubric.

*Students wishing to double up on Geometry and Algebra II must have at least an A- both semesters of Algebra I AND the instructor's recommendation.

*Students are strongly encouraged to take math during their senior year.

*If a student passes a math class with less than a C-, it may be in the student's best interest to repeat the class.



PRE-ALGEBRA (2 semesters)

Credit: 1 **Elective/Required:** Elective or Required **Grade Level:** 9

Prerequisite: Instructor's Recommendation

Course Description: This course is designed to teach the fundamental concepts in depth, and prepare students for concepts used in Algebra and Geometry. The course is a study of general numbers, formulas, equations, graphs, radicals, deductive reasoning etc. (some colleges will not accept this for their Math requirements)

ALGEBRA I (2 semesters)

Credit: 1 **Elective/Required:** Required **Grade Level:** 9-12

Course Description: This course is designed to teach the fundamental concepts in depth, and prepare students for all future math courses. This course is a study of: solving equations and inequalities, linear functions, systems of equations and inequalities, exponents and exponential functions, polynomials and factoring, quadratic equations and functions, radical expressions and equations, rational expressions and functions, and probability.

GEOMETRY (2 semesters)

Credit: 1 **Elective/Required:** Required **Grade Level:** 9-12 **Prerequisite:** Algebra I

Course Description: This course includes the study of plane, solid, and coordinate geometry as they relate to both abstract mathematical concepts as well as real-world problem situations. Topics include logic and proof, parallel lines, polygons, perimeter, area, and volume analysis, similarity and congruence, and right triangle trigonometry. These topics are all embedded in the Common Core State Standards. Students will be required to use different technological tools and manipulatives to discover and explain much of the course content.

ALGEBRA II (2 semesters)**Credit:** 1 **Elective/Required:** Required **Grade Level:** 10-12 **Prerequisite:** Algebra I**Course Description:** This course is a continuation of Algebra I with more in depth study. Fundamental Algebra skills will be applied to such topics as functions, equations and inequalities, probability and statistics, logarithmic and exponential relationships, quadratic and polynomial equations and matrices. These topics are all embedded in the Common Core State Standards. Technology will be used to introduce and expand upon the areas of study listed above. Use of graphing calculators will be incorporated into each chapter.**ACCELERATED ALGEBRA II** (2 semesters)**Credit:** 1 **Grade Level:** 10**Prerequisite:** Geometry (A- or above both semesters), MAP Scores, AND Instructor's Recommendation/Approval****Must finish first semester with a C- or higher to continue second semester****Course Description:** This course will cover the same topics as Algebra II. However some topics will be explored in greater detail and at a faster pace. Additional topics covered in this course are sequences and series, conic sections, inverse functions, periodic functions and trigonometry, and trigonometric identities and equations. Technology will be used to introduce and expand upon the areas of study listed above. Use of graphing calculators will be incorporated into each chapter.**BUSINESS MATH** (2 semesters)**Credit:** 1 **Elective/Required:** Elective **Grade Level:** 11-12**Prerequisite:** Geometry AND Instructor's Recommendation/Approval**Course Description:** This class is intended for students as an alternative to Algebra 2. Content will include the following: review of algebraic operations, using equations, percentages, basic statistics and graphs, taxes, insurance, checkbook and cash records, wages and payroll, depreciation and overhead, financial statements and ratios, distribution of profit and loss, commercial discounts, markup, markdown, simple interest, bank discount, multiple payment plans, compound interest, and annuities.**TRIGONOMETRY & PRE-CALCULUS** (1 semester: Trigonometry & 1 semester: Pre-Calculus)**Credit:** 1 **Elective/Required:** Elective or Required **Grade Level:** 11-12 **Prerequisite:** Algebra II**Course Description:** This class is intended for students who will eventually take Calculus, either in high school or college. Content will include the following: Power Functions, Polynomial Functions, Rational Functions, Exponential and Logarithmic Functions, Trigonometric Functions, Trigonometric Identities and Equations, Systems of Equations and Matrices, Conic Sections and Parametric Equations, Vectors, Polar Coordinates and Complex Numbers, Sequences and Series, Inferential Statistics and Limits and Derivatives.**COLLEGE ALGEBRA** (2 semesters) – Dual-Credit option through Mount Marty College available**Credit:** 1 **Elective/Required:** Elective **Grade Level:** 12**Prerequisite:** Algebra II (C- or above both semesters) OR Instructor Approval**Course Description:** This class is intended for seniors who are looking to keep themselves current on their math skills as they prepare to take a college freshman math course. This course will have a strong focus on functions (linear, quadratic, polynomial, rational, exponential, and logarithmic). Additional topics will include matrices, systems of equations/inequalities, and sequences/series. Technology will be used to introduce and expand upon the areas of study listed above. Use of graphing calculators will be incorporated into each chapter.**AP STATISTICS** (2 semesters)**Credit:** 1 **Elective/Required:** Elective **Grade Level:** 11-12**Prerequisite:** Algebra II (C- or above both semesters)**Course Description:** Statistics is the area of math that deals with the collection and analysis of data. Students should have a prior knowledge of Algebra II concepts. Students will construct/interpret graphical displays of distributions of data as well as summarize distributions of data. Probability will be a major focus, as students will explore random phenomena using probability and simulation. Finally, students will use statistical inference to estimate population parameters and test hypotheses. By the end of this course, students should have gained knowledge and a better appreciation for higher-level mathematics and critical thinking skills. The students should also have developed abilities to express their mathematical thinking both verbally and in written form, using technology appropriately and when applicable. The class will be taught at a brisk pace.

AP CALCULUS AB (2 semesters) – Dual-Credit option through Mount Marty College available

Credit: 1 **Elective/Required:** Elective **Grade Level:** 11-12

Prerequisite: Trigonometry/Pre-Calculus AND completion of Trigonometry/Precalculus with C- or above

Course Description: Calculus is the area of math that deals with change. Students should have a prior knowledge of the following mathematical concepts: trigonometry, properties of numbers and their operations, solving ratios, working with algebraic equations, inequalities, and graphs of functions, domains, inverses, lines. Topics covered include but are not limited to the study of limits, derivatives, applications of the derivative, differential equations, slope fields, the definite and indefinite integral, applications of integrals, and the Fundamental Theorem of Calculus. By the end of this course, students should have gained knowledge and a better appreciation for higher-level mathematics and critical thinking skills. The students should also have developed abilities to express their mathematical thinking both verbally and in written form, using technology appropriately and when applicable. The class will be taught at a brisk pace, with the majority of the work being completed without the use of a calculator.

MISCELLANEOUS COURSES

Course Name	Course Code	Credit	Prerequisite	Grade
Internship	SS216	0.5	None	11-12
Student Aide	SA400	0.25	None	11-12

INTERNSHIP

Credit: 0.5 **Elective/Required:** Elective **Grade Level:** 11-12

Course Description: An internship experience provides the student with an opportunity to explore career interests while applying knowledge and skills learned in the classroom in a work setting. Students will be required to complete 60 hours in their placement. Students will submit a weekly journal and a final paper at the end of the semester.

STUDENT AIDE

Credit: 0.25 **Elective/Required:** Elective **Grade Level:** 11-12 **Pass/Fail**

Prerequisite: Must have a cumulative GPA of 2.5 or 3.0 for the previous semester & no ISS/OSS the previous year

PHYSICAL EDUCATION COURSES

0.5 credit required

Course Name	Course Code	Credit	Prerequisite	Grade
Fitness and Aerobics	PE223	0.5	None	9-12
Physical Education	PE220	0.5	None	9-12
Strength Training	PE224	0.5	None	9-12

FITNESS AND AEROBICS (1 semester)

Credit: 0.5 **Elective/Required:** Elective **Grade Level:** 9-12

Course Description: Students will develop a year-round life-time fitness program based upon aerobic dance and fitness, including proper warm-up, heart-rate monitoring, and cool down exercises. Other fitness activities such as power walking, biking, and weight conditioning will also be taught.

PHYSICAL EDUCATION (1 semester)

Credit: 0.5 **Elective/Required:** Elective **Grade Level:** 9-12

Course Description: The physical aspect of learning, cardiovascular fitness, flexibility, teamwork, and promoting and enhancing a healthy lifestyle

STRENGTH TRAINING (1 semester)

Credit: 0.5 **Elective/Required:** Elective **Grade Level:** 9-12

Course Description: Students will develop an understanding of proper strength training techniques, develop and maintain a suitable level of physical fitness, and acquire desirable social standards and ethical concepts, positive self-concept, and self- image. They'll learn the personal and educational benefits of a strength training program.

**Students may earn up to two credits each of Strength Training, Physical Education and Fitness & Aerobics*

SCIENCE COURSES

3 credits required

Course Name	Course Code	Credit	Prerequisite	Grade
Required:				
Physical Science	SC191	1	None	9
Accelerated Physical Science	SC185	1	Algebra I	9
Principles of Biology	SC188	1	Physical Science & Pre-Algebra	10-12
Biology	SC196	1	Physical Science & Algebra I	10-12
Accelerated Biology	SC189	1	Physical Science & Algebra I	10-12
Electives:				
Chemistry	SC198	1	Physical Science & Algebra I	10-12
AP Chemistry	SC204	1	Chemistry & Algebra II	11-12
Environmental Science	SC200	1	Biology	11-12
Physics	SC199	1	Physical Science & Algebra I	10-12
Advanced Biology	SC194	1	Accelerated Biology & Accelerated Chemistry	11-12
Human Anatomy	SC197	1	Biology	11-12

PHYSICAL SCIENCE (2 semesters)

Credit: 1 **Elective/Required:** Required **Grade Level:** 9

Course Description: This course orients the students to the field of physical science with science fundamentals of physics, chemistry, and Earth science combined with technology and applications in these fields. Laboratory work gives the students an active involvement in the processes of science. This course is a prerequisite for biology, chemistry, and physics.”

ACCELERATED PHYSICAL SCIENCE (2 semesters)

Credit: 1 **Elective/Required:** Required **Grade Level:** 9 **Prerequisite:** Algebra I

Course Description: This course will follow the curriculum of General Physical Science but will move at quicker pace and will include more in depth study.

PRINCIPLES OF BIOLOGY (2 semesters)

Credit: 1 **Elective/Required:** Required **Grade Level:** 10-12 **Prerequisite:** Pre-Algebra

Course Description: Biology is the study of life at all levels, from cells to groups of organisms. During this course, reading, listening, discussing, and working in the laboratory are used to provide each student with the opportunity to understand scientific procedures and the important aspects of biological processes.

BIOLOGY (2 semesters)

Credit: 1 **Elective/Required:** Required **Grade Level:** 10-12 **Prerequisite:** Algebra I

Course Description: Biology is the study of life at all levels, from cells to groups of organisms. This course provides an in-depth introduction to biology by reading, listening, discussing, and working in the laboratory. All of which provide each student with the opportunity to understand scientific procedures and the important aspects of biological processes.

ACCELERATED BIOLOGY (2 semesters)

Credit: 1 **Elective/Required:** Required **Grade Level:** 10-12 **Prerequisite:** Algebra I

Course Description: Advanced Biology is a class designed to be taken as the prerequisite to AP Biology. It is meant to be a more in depth introductory course in Biology, where the students plan is to follow up with AP Biology the following year.

Upon completion of both courses, the student goal would be to earn credit by taking the AP Biology Exam at the end of the course. The course work will be more detailed and labs will be more extensive for understanding and application of biological processes and concepts.

ENVIRONMENTAL SCIENCE (2 semesters)

Credit: 1 **Elective/Required:** Elective **Grade Level:** 11-12

Course Description: Environmental Science is the study of Earth’s systems, ecological phenomena, sustainability of Earth’s resources, and some social science with the goal of increasing our awareness of how the natural environment and the human culture interact with each other.

CHEMISTRY (2 semesters)**Credit:** 1 **Elective/Required:** Elective **Grade Level:** 10-12 **Prerequisite:** Algebra I

Course Description: This class presents an up-to-date approach to teaching chemistry. Chemical concepts and principles are developed in a logical yet flexible order to make the study of chemistry interesting and challenging for students. Many features have been included to strengthen the presentation with the intent of increasing students' comprehension and interest in chemistry. Laboratory work is emphasized to give the students an active involvement in the processes of chemistry.

AP CHEMISTRY (2 semesters)**Credit:** 1 **Elective/Required:** Elective **Grade Level:** 11-12

Prerequisite: "B" or better in Chemistry, enrolled in Algebra II ("C" or better if completed), and/or teacher recommendation **Course Description:** Advanced Placement Chemistry provides an orderly development of the fundamental concepts and principles of chemistry with an emphasis on inquiry and critical thinking skills including problem-solving, mathematical reasoning, and experimental investigations. Topics of study include the structure of matter, states of matter, chemical kinetics, thermochemistry and thermodynamics, and descriptive chemistry. A strong emphasis is placed on chemical equilibrium, acids and bases, and chemical reactions. Laboratory work is an integral component of this course. This core science course requires a working knowledge of chemistry and second-year algebra. The pace and depth of material covered exceeds the standard high school chemistry course, as does the college-level textbook.

PHYSICS (2 semesters)**Credit:** 1 **Elective/Required:** Elective **Grade Level:** 10-12**Prerequisite:** Physical Science & must receive a "B" or better in Algebra I or have completed Geometry

Course Description: Physics in an investigative program of study that emphasizes the study of motion, energy, sound, light, and electricity. This course is designed to give students a broad understanding of physics. The concepts will be explored both by investigating them with activities and by applying quantitative relationships using math skills learned in Algebra I.

ADVANCED BIOLOGY (2 semesters)**Credit:** 1 **Elective/Required:** Elective **Grade Level:** 10-12**Prerequisite:** Accelerated Biology & Accelerated Chemistry

Course Description: Advanced Biology II aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. The topics covered will be molecular biology, cells, heredity, evolution, and the ecology of organisms and populations. Students will be prepared to take the AP Biology Exam at the end of the course.

HUMAN ANATOMY (2 semesters)**Credit:** 1 **Elective/Required:** Elective **Grade Level:** 10-12**Prerequisites:** Biology & Chemistry

Course Description: This course covers the structure and functions of the human body. Basic facts about human anatomy and physiology are presented. It is intended to provide a conceptual framework and the necessary information upon which to build. As a result, the student has a more integrated understanding of human structure and function. The style of presentation of material, its readability, accuracy, and level of coverage has been carefully developed to meet the needs of students taking an introductory course in anatomy and physiology.

SOCIAL STUDIES COURSES

3 credits required

Course Name	Course Code	Credit	Prerequisite	Grade
Required:				
World History	SS207	0.5	None	9
World Geography	SS211	0.5	None	9
American History	SS208	1	None	10
American Government	SS210	0.5	None	11
Electives:				
Modern American History	SS212	0.5	None	11-12
Psychology	SS209	0.5	None	11-12
Sociology	SS214	0.5	None	11-12

WORLD HISTORY (1 semester)

Credit: 0.5

Elective/Required: Required

Grade Level: 9

Course Description: This course covers world history from the Renaissance and Reformation to modern day. Emphasis is placed on the Renaissance and Reformation, the Enlightenment, the French Revolution and the rise and fall of Napoleon, changes through the 19th century, the World Wars, and modern events.

WORLD GEOGRAPHY (1 semester)

Credit: 0.5

Elective/Required: Required

Grade Level: 9

Course Description: The cultural, economic, and political activities of a nation or a region of the world are the consequences of its physical resources and past activities. The distinctive features of countries in the Islamic World, Africa, South East Asia, China, Japan, and Western Europe are examined in the course.

AMERICAN HISTORY (2 semesters)

Credit: 1

Elective/Required: Required

Grade Level: 10

Course Description: This course covers the period from post-revolutionary America to the present. Emphasis is placed on the Constitution, national expansion, the Civil War, reconstruction, industrialization, World War I, the Depression, World War II, the Cold War, and the development of modern America in the world.

AMERICAN GOVERNMENT (1 semester)

Credit: 0.5

Elective/Required: Required

Grade Level: 11

Course Description: American Government is an introductory course to understanding the basic elements of our Democracy. The students will learn the principles, fundamentals, and basic structure of our Democracy, the functions of those elements, and the dynamic nature of our government, other forms of government, and an emphasis on current events.

MODERN AMERICAN HISTORY (1 semester)

Credit: 0.5

Elective/Required: Elective

Grade Level: 11-12

Course Description: This class will examine the recent events of the 20th Century from an American perspective. The people, issues, and debates explored will cover the mid-1940's to present time, specifically including the end of WWII, the cold War, the social changes of the 1960's, and the Kennedy Administration. This course will include government, historical, economic and social topics.

PSYCHOLOGY (1 semester)

Credit: 0.5

Elective/Required: Elective

Grade Level: 11-12

Course Description: In psychology, the student will study the mental processes, behavior, and emotional characteristics of individuals. Students will learn the following: the biological basis of behavior, sensory and perception, the learning process, memory, human growth and development, and normal vs. abnormal behavior.

SOCIOLOGY (1 semester)

Credit: 0.5

Elective/Required: Elective

Grade Level: 11-12

Course Description: Sociology studies human society and social behavior. Topics discussed include culture, socialization, deviance, social structure, groups, poverty, inequalities, and institutions such as the family, education, government, economy, and religion. Looking at ourselves and how society influences our behavior, values, and beliefs will also be covered.