

Southwest Valley Course Guide High School Students 2021 – 2022

It is the policy of the Southwest Valley Community School District not to illegally discriminate the basis of race, color, national origin, sex, disability, religion, creed, age, marital status, sexual orientation, gender identity, and socioeconomic status in its educational programs and its employment practices. There is a grievance procedure for processing complaints of discrimination. If you have questions or a grievance related to this policy, please contact the district's Equity Coordinator Chris Fenster, Superintendent of Schools, Southwest Valley Community School District, 904 8th Street, Corning, Iowa, 50841; by phone at 641-322-4242; by email at cfenster@southwestvalley.org

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Required Courses for Graduation

SUBJECT AREA	# credits required	Classes required
English	8	<i>Grades 9-11:</i> Basic Comp I (9 th), Basic Comp II (10 th), and 4 sem. English electives <i>Grade 12:</i> Comp I and II or Applied Comp/Modern Literature.
Mathematics	6	Algebra IA—IB <i>OR</i> Algebra I, Geometry, and math electives
Science	6	Physical Science (9 th), Biology (10 th), electives
Social Studies	7	Geography and Foundations of Government (9 th), World History (10 th), American History (11 th), Government (12 th)
Physical Education	4	4 semesters—to total 4 credits
Health	1	Health I or Health II; and CPR training
Career Readiness	1	Taken in junior or senior year (one semester)

Note: Exceptions to the Southwest Valley High School required credits may be granted when considered in the best interest of the student. EXAMPLE: Student transfers from another district which requires fewer credits. A student granted such an exception will still be required to meet all requirements regarding subject area credits. No exceptions for state-mandated courses.

Graduation Requirements and Sequence One full semester class = one credit

(Example: You need four credits of PE so you will need to complete four *semesters* of PE) (Math: six semesters of Math = 3 full years of Math)

Graduation Requirements	#CR	9 th Grade	10 th Grade	11 th Grade	12 th Grade
English	8	Basic Comp. + English Elective	Basic Comp II + English Elective	English Elective + English Elective	English Comp I & II OR Applied Communications
Social Studies	7	Geography and Foundations of Government	World History(1 sem) + Social Studies Elective	American History	Government
Science	6	Physical Science	Biology	Full year of elective science	Elective
Math Sequences	6	Algebra IA Algebra I Algebra I and Geometry	-----Algebra IB -----Geometry -----Algebra II	-----Geometry -----Algebra II -----Trig-Analytic Geometry and Pre-Calculus	Elective
PE	4	PE	PE	PE	PE
Health	1	Health I with CPR	Health II if do not have Health I	Health II if do not have Health I	Health II if do not have Health I

Important Information

SENIOR YEAR PLUS

Current legislation under Senior Year Plus allows students rigorous academic options during high school, for which students passing with a C or ↑ also earn college credit. Southwest Valley High School offers Concurrent Enrollment, Independent Online Learning, and Career Academies through agreements with Southwestern Community College (SWCC).

Any student signed up for a college credit class, whether it is taught on Corning High School campus or online, must meet all of the entry requirements of Southwestern Community College. The students must have a qualifying ACCUPLACER score predetermined by the community college or an ACT test score of 19. Students can register for the ACCUPLACER exam in the high school counselor's office. Students enrolled in college-credit courses must also abide by an attendance policy, as established in concordance with college course standards. Students are allowed to take up to 23 credit hours per year through one educational institution.

More information on concurrent college online and Career Academy courses can be found starting on page 36.

Students who wish to pursue other options for college credit can pursue the Post-Secondary Enrollment Option (PSEO). ***If a student does not successfully complete a PSEO course, the student will be held financially responsible for all tuition, books, and fees, typically totaling around \$500.***

ELP -- TALENTED AND GIFTED:

Talented and Gifted: Students designated enrolled in the Extended Learning Program (ELP) receive notification from the ELP facilitator in the spring semester. Students that choose to enroll in a college class to fulfill one of the ELP requirements must meet with the ELP facilitator for guidance in choosing courses. The ELP facilitator and student will contact the counselor office with their choices. ELP students may choose from concurrent (SWCC) or Advanced Placement (AP) options.

ADVANCED PLACEMENT:

Advanced Placement (AP): Southwest Valley CSD offers Advanced Placement courses through Iowa Online AP Academy. Students who desire to enroll must work with the counselor to determine eligibility and work load. Choosing an online AP class takes determination, strong work ethic, and dedication to extra hours of study and practice. Students should be able to navigate an online environment and be able to blog and work with chat groups. The decision to enroll in online AP courses should include serious scrutiny of the rigorous program by student, parents, teachers, counselor, and principal. Students who finish an AP class and would like college credit must complete an AP exam in the spring. The score of AP exams is scaled from 1-5. Students must score a three (3) or ↑ to be eligible for college credit.

AP Online Academy: ADD and DROP Time Frame: If the student drops an AP class after 10 school days (according to AP Academy start date) the student/parent-guardian are required to pay a \$350 drop fee.

Courses available through Iowa Online AP Academy

Course	Prerequisite
AP Biology	High School Biology
AP Calculus AB	4 years of College Prep Mathematics (suggested coursework—Algebra II, Geometry, Pre-Calculus with Trig.
AP Chemistry	High School Chemistry
AP English Language Composition	At least a “B” in prior English courses
AP English Literature and Composition	At least a “B” in prior English courses
AP Government	U. S. History
AP Macroeconomics (semester)	Algebra II or Math Analysis
AP Microeconomics (semester)	Algebra I
AP Psychology (semester)	Biology
AP Statistics (semester)	Algebra II or Math Analysis
AP Spanish	Spanish I, II, III, IV
AP U. S. History	At least a “B” in all Social Studies classes

Name: _____

STUDENT 4 YEAR PLAN

Date: _____

Planned Courses	Credits		Planned Courses	Credits
<i>Freshman (9) Year</i>			<i>Sophomore (10) Year</i>	
English (Basic Comp + elective)	2		English (Basic Comp II + elective)	2
Geography (1 st sem), Foundations of Government (2 nd Sem)	2		World History (1 sem) + Social Studies Elective	2
Physical Science	2		Biology	2
Math (Algebra IA, IB, Algebra I, Geom)	2		Math (Algebra 1B, Geometry, Algebra II)	2
PE	1		PE	1
Health	1		Elective	
Elective			Elective	
Elective			Elective	
Elective			Elective	
Elective				
Total:	16		Total:	16
<i>Junior (11) Year</i>			<i>Senior (12) Year</i>	
English (elective + elective)	2		English (Applied Communications or Composition 1)	1
Career Readiness	1		English (Applied Communications or Composition 2)	1
American History	2		Government	1
Science Elective:	2		PE	1
Math Elective:	2			
PE	1			
Total	16		Total	16
			<i>SWV GRADUATION CREDITS</i>	56
Student signature:	Date:		Parent signature:	Date:

Course Listings

ENGLISH	#sem	MATH	#sem
Basic Composition (9)	1	Algebra 1A	2
Basic Composition II (10)	1	Algebra 1B	2
American Literature	1	Algebra I	2
Mythology	1	Geometry	2
Creative Writing	1	Principles of Geometry	2
English Composition I (12)(CC)	1	Algebra II	2
English Composition II (12)(CC)	1	Trigonometry/Analytic Geometry	1
Applied Communications (12)	1	Pre-Calculus	1
Introduction to Literature (CC)	1	Core Math	2
Assisted Reading	1	Consumer Math	2
Novels	1	College Statistics (CC)	1
Modern Short Fiction	1	Calculus I (CC)	1
Poetry (Fall of Even Years)	1	Calculus II (CC)	1
Literature: Social Justice	1	College Algebra (CC)	1
Lit of the Stage (Fall of Odd Years)	1		
Native American Literature	1	SCIENCE	
Writing for Persuasion	1	Physical Science (9)	2
Writing for Communication	1	Biology (10)	2
Dystopian Literature	1	Chemistry	2
British Literature	1	Physics	2
Modern Short Fiction	1	Pre-Anatomy	1
		Anatomy & Physiology	1
SOCIAL STUDIES		Advanced Chemistry	2
Geography / Foundations of Gov.	2	Aerospace engineering	2
World History (10)	1	Principles of Engineering	2
American History (11)	2	Zoology	1
American Government (12)	1	Marine Science	1
Micro Economics	1		
Economics	1	FOREIGN LANGUAGE	
Contemporary Issues	1	Spanish I	2
Psychology	1	Spanish II	2
		Spanish III	2
Business		Spanish IV	2
Introduction to Business	2		
Accounting I	2	HUMAN SERVICES (FCS)	
Accounting II	2	Principles of Human Services	2
Multi Media	1	Nutrition and Wellness I	1
Career Readiness (11)	1	Nutrition and Wellness II	1
Introduction to Computers (CC)	1	Culinary Essentials	2
Computer Business Applications (CC)	1	Human Growth & Development I	1
School to Work (1 class period)	1	Human Growth & Development II	1
Introduction to Computer Science	1	Consumer and Personal Finance	1
Workplace Exp. – Business (4 periods)	1	Workplace Exp. – FCS (4 periods)	1

MUSIC		AGRICULTURE & TECHNOLOGY	
Band	2	Principles of Ag Science and Technology	2
Concert Choir	2	Basic Soil & Plant Management	1
Music Appreciation	1	Basic Animal Science and Technology	1
		Advanced Animal Science and Tech	1
ART		Vet Tech	1
Drawing	1	Ag Business and Management	1
Painting	1	Principles of Ag Business and Sales	1
Ceramics I	1	Agriculture Mechanics	1
Ceramics II	1	Ag Welding	1
Applied Art	1	Horticultural Science and Technology	2
		Advanced Horticulture (Spring Offering)	1
Art I	1	Entrepreneurship and Job Seeking Skills	1
Art II	1	Agriculture Career Opportunities	1
Media	1	Agriculture Natural Resources	1
Printmaking	1	Farm and Home Maintenance	1
		Ag Power and Technology (Fall of Odd Years)	1
PHYSICAL EDUCATION		Ag Woodworking	1
Physical Education	1	Ag Construction	1
Health I	1	Leadership in Agriculture	1
Health II	1	Mechanical Systems in Ag (Fall of Even Years)	1
Weight Lifting	1	Ag Carpentry	1
CAREER ACADEMY (all CC)		Ag Workplace Experience (4 periods)	1
Health Career Academy (1 yr)	2 per sem		
Computer/Information Technology (2 yr)	4 per sem	SPECIAL EDUCATION	
Automotive Technology (2yr)	4 per sem	Study Skills	1
Carpentry/Building Trades (2yr)	4 per sem	Experienced-Based Career Education	TBD
Electrical Technology (2yr)	4 per sem		

ENGLISH COURSES

Course Title	Length	Grade offered	Required/ Elective	Prerequisite	Description
Novels	1 sem	9-11	Elective		Exploration of various novels through style, structure, and historic relevance.
American Literature	1 sem	11-12	Elective		This course examines the literature of the United States from colonial times through the present, focusing particularly on American ideals and how these are reflected in American literature over time.
British Literature	1 sem	9-11	Elective		A survey of master works in British Literature
Lit of the Stage	1 sem	9-11	Elective		Examine the texts of the modern stage, including famous plays (Offered Fall of odd years)
Literature: Social Justice	1 sem	9-11	Elective		Exploring the theme of social justice in literature
Poetry	1 sem	9-11	Elective		Exploration of the genre: style, structure, and meaning (Offered Fall of even years)
Modern Short Fiction	1 sem	9-11	Elective		Exploration of the short story: critical thinking about form, structure, plot and characterization
Native American Literature	1 sem	9-11	Elective		Exploring the literature and culture of the Native American people, past and present
Dystopian Literature	1 sem	9-11	Elective		Exploring the themes of literature about a future gone awry
Strategic Reading	1 sem	9-11	Elective		Students will read and analyze works of fiction and nonfiction that they choose. Crucial skills for this course include note-taking and evaluation of texts. Daily reading and response is required.
Mythology	1 sem	9-11	Elective		This course examines themes, characters, and texts in the world of mythology. While special emphasis is placed on Greek and Roman mythology, much of the course focuses on myths both older (the ancient Egyptians) and newer (the Norse). Students will be expected to explore these myths in writing, discussion, and various individual and group projects.
Basic Composition	1 sem	9-11	Required		A basic writing class designed for grades 9-10, this class can be available to 11 th graders as well
Basic Composition II	1 sem	9-11	Required	Basic Composition	A continuation of Basic Composition that explores more technical and research oriented writing. This class is required but may be taken by 9 th , 10 th and 11 th grade students.
Creative Writing	1 sem	9-11	Elective		Creative writing is a semester-long course that explores a broad variety of creative writing genres. Genres covered in this course may include (but are not limited to) poetry, creative nonfiction, short fiction, and short plays. Students will develop writing skills through close and careful reading of genre examples and through daily writing practice. The writing workshop itself, where we share our work with others for constructive criticism and honest

					commentary, is a central focus of this course, and revision based on workshop feedback will be required. Students will complete a portfolio of writing over the course of the semester.
Writing for Communication	1 sem	9-11	Elective	Basic Comp	Students focus on writing and presenting for a variety of audiences.
Writing for Persuasion	1 sem	9-11	Elective		Students will focus on research writing, developing their persuasive skills in thesis-driven essays and debates.
Literature of the Stage	1 sem	9-11	Elective		This course focuses on the texts of the theater across time. Students will read, analyze and respond to plays ranging from Ancient Greek tragedy to modern productions, focusing on the unique literary qualities of drama.
English Composition I (12) SWCC class ENG 105	1 sem	12	Elective	Qualifying Accuplacer score or ACT (19)	This course offers the students an opportunity to improve written composition and develop skills acceptable on a college freshman level. The various models of composition that are often the focus of the college freshman class will be used extensively in the class. Attendance policy.
English Composition II (12) SWCC class ENG 106	1 sem	12	Elective	Qualifying Accuplacer score or ACT (19)	This class offers college-bound students an opportunity to improve their composition skills through persuasive writing. The term papers are required. Attendance policy.
Applied Communications (12)	1 sem	12	Elective	6 previous English credits	This course is the alternate for seniors not interested in taking the college level composition courses. This class will cover aspects of modern literature as well as composition and writing.
Introduction to Literature SWCC class LIT 101	1 sem	11-12	Elective	Qualifying Accuplacer score or ACT (19)	Students will learn to read critically and do rhetorical and stylistic analysis. The goal of this course is to create strong readers and writers who will have the skills to read and write effectively in their college courses. Students will be asked to read extensively and write several analytical essays.

MATHEMATICS COURSES

Course Title	Length	Grade offered	Required/ Elective	Prerequisite	Description
Algebra IA	2 sem	9-12			This is the first year of a 2-year algebra course. It will include foundations of core algebra, solving equations and inequalities, and working with functions. Skills will include graphing and variable representations of real-world applications. Problem-solving activities and applications encourage students to model patterns and relationships with variables and functions.
Algebra IB	2 sem	9-12			This is the second year of a 2-year Algebra course. It will include studying exponents and their functions, polynomials, factoring, and quadratic equations/functions. They will also explore radical and rational equations and data analysis. Problem-solving activities and applications encourage students to model patterns and relationships with variables and functions.
Algebra I	2 sem	9-12		C- or ↑ in 8th grade math	This courses guides students to use variables as a means of representation and is a pre-requisite for geometry and Algebra II. They will explore the language of algebra in verbal, tabular, graphical, and symbolic forms. Problem-solving activities and applications encourage students to model patterns and relationships with variables and functions.
Geometry	2 sem	10-12		Algebra I (at least C-) or taking it concurrently	Geometry develops logic and reasoning through traditional geometry concepts. Early emphasis is on proofs. Formal and paragraph proofs are covered. Direct and indirect proofs are used. Later more emphasis is put on application. Methods of problem solving, cooperative learning, geometric construction and technology are used periodically. Probability and statistics are covered at the end of the year if time permits. Basic concepts for advanced study in mathematics, science, and computers are taught. Evaluation: daily work, quizzes & tests.

Course Title	Length	Grade offered	Required/ Elective	Prerequisite	Description
Principles of Geometry	2 sem	10-12		Algebra IA and IB or Algebra I with teacher recommendation	This course is the Geometry placement for students who have successfully completed Algebra IA and IB. It is not the student's choice to take this course as a replacement for Geometry, it must be based on teacher recommendation.
Algebra II	2 sem	11-12		Algebra I, Geometry (at least C-)	This class is basically an extension of topics in Algebra I to more advanced topics and their applications. Topics of matrices, probabilities, and statistics will also be explored. It will also include a study of trig the last part of the year as time allows. Evaluation: daily work, quizzes & tests. Graphing calculators are used.
College Algebra SWCC class MAT 120	1 sem	11-12		Algebra I Algebra II Geometry with C- or ↑ Qualifying ACCUPLACER or ACT	ACT: 19 or ↑ Qualifying ACCUPLACER score There is also an attendance requirement. This course is the study of advanced algebra and pre-calculus. Topics covered: real number system, functions, graphs, exponential functions, logarithmic functions, complex number system, polynomial functions, matrices, and parametric equations. Taught at SWV by a SWCC instructor.
Trigonometry and Analytic Geometry	1 sem	11-12		Algebra I Algebra II Geometry with C- or ↑	1st Semester Topics in trigonometry include but are not limited to the measurement of angles, arc, and sectors, the six trigonometric functions and their graphs, trigonometric identities and equations, law of sines and cosines, vectors, complex numbers, and polar coordinates. Topics in geometry include an analytical investigation of the conic sections. Additional topics may include congruence, area, parallelism, similarity, and volume in Euclidean geometry.
Core Math	2 sem	11-12		Algebra and Geometry	This class will cover required Iowa Core high school math standards including topics in algebra, geometry, statistics, and consumer math. Students should have taken and completed Algebra and Geometry in order to register for this course. Core Math is built to be an independent course to strengthen individual math skills to prepare students for college.

Course Title	Length	Grade offered	Required/ Elective	Prerequisite	Description
Pre-Calculus	1 sem	11-12		Algebra I Algebra II Geometry with C- or ↑	2nd Semester This course combines the study of Trigonometry, Elementary Functions, Analytic Geometry, and Math Analysis topics as preparation for calculus. Topics typically include the study of complex numbers; polynomial, logarithmic, exponential, rational, right trigonometric, and circular functions, and their relations, inverses and graphs; trigonometric identities and equations; solutions of right and oblique triangles; vectors; the polar coordinate system; conic sections; Boolean algebra and symbolic logic; mathematical induction; matrix algebra; sequences and series; and limits and continuity.
Statistics SWCC class MAT 156	1 sem	11-12		Algebra II with C- or ↑ and ACCUPLACER or ACT score	Qualifying ACCUPLACER score or ACT test score (19) Statistics is a non-calculus based course designed to lay a foundation which will enable students to understand statistical thinking and apply basic statistical techniques. The qualitative and quantitative study in statistics will be useful for students pursuing majors in a wide variety of disciplines: psychology, sociology, business, economics, physical science, biological sciences, education, engineering, journalism, and career and technical programs. SWCC instructor.
Calculus I SWCC class Online—ICN MAT 210	1 sem	12		College Alg, Trig ACCUPLACER or ACT score	This course continues where college algebra/trigonometry left off. This course studies limits and continuity, derivatives of elementary functions, curve sketching, extreme values, rates of change, integration, and applications of integration.
Calculus II SWCC class Online—ICN MAT 216	1 sem	12		Calculus I with C- or ↑	This course studies transcendental functions, techniques of integration, infinite series, conic sections, parameterized curves, and polar coordinates.
Consumer Math	2 sem	11-12		Algebra I or IA and IB and Geometry	Consumer Math reinforces basic math topics and applies these skills to business, financial, and everyday situations. Applications include budgeting, taxation, credit, banking services, insurance, buying and selling products and services, home and/or car ownership and rental, managing personal income, and investment. Students in Consumer Math will operate the T-Wolf Café and manage its various business affairs, including taking and fulfilling orders, taking inventory, pricing items for sale, advertisement, and day-to-day business needs.

SOCIAL STUDIES COURSES

Course Title	Length	Grade offered	Required/ Elective	Prerequisite	Description
Geography	1 sem	9	Required		Geography is a ninth-grade class. It focuses on the areas of physical geography or topography (including oceans, rivers, land masses, islands, etc.), political geography (including regions, continents, countries, capitals, culture, tourism, and governments), and environmental and human geography (the division of the world's natural resources and the pollution that mankind generates and how humans understand, use, and alter the earth's surface). The class makes use of geographic tools such as maps, atlases, and symbols.
Foundations of Government	1 sem	9	Required		Foundations of Government is a preparatory course for ninth grade to help the students be ready for the more advanced American Government class as juniors or seniors. The class will examine the beginnings of how America became free of England. It will look at how the Declaration of Independence justified the need for freedom from England. The first document of governance, the Articles of Confederation, will be analyzed along with the Constitution (which includes a major emphasis on the Bill of Rights). The students will obtain some basic knowledge about national and state governments and will be given an opportunity to do some projects and debating.
World History	2 sem	10	Required		World History is the study of mankind and civilization. It is designed to review mankind's development from Prehistoric/Stone Age to post-World War II era. The course covers political developments, social and economic life.
American History	2 sem	11	Required		American History studies the growth of our nation from the time period after the Civil War (Reconstruction) to the modern era we live in. Through the use of primary and secondary sources, students will explore how our nation has emerged as a world power. They will also make historical connections to their own lives and learn of the sacrifices made by others in our past to help preserve and strengthen our freedoms we enjoy today.
American Government	1 sem	12	Required		Government is an introduction to the patterns, forms, and functions of our national, state, and local government. Studied are the obligations, rights, and duties of citizens and how the American system works. Students will be exposed to the election process at all levels of government and contemporary problems of the day.
Contemporary Issues	1 sem	10-12	Elective		The class will focus on current event situations and how the precedents set by past situations affect the outcome of the current events.

					Students will utilize a wide variety of sources to study modern media and various perspectives on issues of the day. Through their studies, students will be informed on the latest current events as well as provide analysis about topics in the world they live in.
Sociology	1 sem	10-12	Elective		The study of cultures and society. This class will include an introduction to the subject as well as specific topics such as deviance, poverty, and aging. If already taken intro to sociology (SWCC course) please consult teacher before enrolling.
Micro Economics	1 sem	11-12	Elective		This course covers foundations of personal finance, empowering students to make sound financial decisions for life. This course meets state of Iowa financial literacy requirements.
Economics	1 sem	11-12	Elective		This class will study major concepts and theories that economists use to explain why the world is the way that it is. Current events, concerning the U.S. and world stock markets, and other major economic news will also be explored throughout the class.
Psychology	1 sem	10-12	Elective		<p>This class will introduce students to the overall topic of psychology. It will include various perspectives, methods of research, and social theories in psychology. The biological basis of psychology will be examined and while not to the extent sociology offers, how outside factors impact the individual, too. While sociology looks more at the group, psychology looks more at the individual. The two classes complement each other, but you need not have taken sociology to take this class.</p> <p>Those who have previously taken the Southwestern Community College course on psychology should probably focus on other classes to sign up for. For those looking to learn more about this interesting topic of study and have not had previous classes on this subject, it would be a great class to sign up for!</p>

SCIENCE COURSES

Course Title	Length	Grade offered	Required/ Elective	Prerequisite	Description
Physical Science	2 sem	9	Required		Physical science is an introductory class in science for 9th grade students. The course covers many areas of the non-life sciences. It is designed to give each student a firm background in understanding the world in which we live. This course is a prerequisite for both physics and chemistry. (These are needed for anyone entering a health care career.) Many experiments and demonstrations are performed during the year.
Biology	2 sem	10	Required		Biology, the study of life, begins with the cell, and its structure and function. Other topics covered are genetics and inheritance, evolution, the human body and our environment and Ecosystems.
Chemistry	2 sem	11-12	Elective	Geometry and Alg II or take concurrent	Chemistry is the science of materials and a study of matter and the interactions of matter. Chemical reactions, structure of the atom, electrochemistry and acid base interactions are studied. This class is required by most colleges for anyone entering family, science or health-related programs.
Advanced Chemistry	2 sem	11-12	Elective	Chemistry, Geometry, and Alg II	This course is a continuation of the general Chemistry curriculum. Students successfully completing this course will be endowed with an exceptional understanding of the fundamentals of chemistry and achieve proficiency in solving chemical problems.
Physics	2 sem	12	Elective	Alg I, Phy Science, Chemistry with C- or ↑	Physics is a general introduction to all parts of physics. This includes motion, dynamics, energy, light, and waves. The class uses a variety of materials, media and experiments to aid learning of physics.
Pre-Anatomy	1 sem	10-12	Elective		Students explore concepts of biology and medicine to determine factors that led to the death of a fictional person. While investigating the case, students examine autopsy reports, investigate medical history, and explore medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, basic biology, medicine, and research processes while allowing them to design their own experiments to solve problems.
Anatomy and Physiology	1 sem	10-12	Elective	Pre-Anatomy	Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body

					functions such as muscle movement, reflex and voluntary action, and respiration. Exploring science in action, students build organs and tissues on a skeletal manikin, work through interesting real world cases and often play the roles of biomedical professionals to solve medical mysteries.
Principles of Engineering	2 sem	11-12	Elective	Geometry	Students explore a broad range of engineering topics including mechanisms, strength of structure and materials, and automation, and then apply what they know to take on challenges like designing a self-powered car.
Aerospace Engineering	2 sem	10-12	Elective		Students explore the physics of flight and bring what they're learning to life through hands-on projects like designing a glider and creating a program for an autonomous space rover.
Zoology	1 sem	10-12	Elective		The scientific study of the behavior, structure, physiology, classification, and distribution of animals.
Marine Science	1 sem	10-12	Elective		The study of the physical and biological aspects of the ocean.

FOREIGN LANGUAGE

Course Title	Length	Grade offered	Required/ Elective	Prerequisite	Description
Spanish I	2 sem	9-12	Elective	Recommended 75% or ↑ in 8th Grade English	A beginning Spanish course which emphasizes speaking, writing, listening, and beginning reading of the language along with an exposure to Spanish culture.
Spanish II	2 sem	10-12	Elective	75% or ↑ proficiency in Spanish I	A course following Spanish I which deals with intermediate level conversation, writing, listening, and covers more in-depth reading activities.
Spanish III	2 sem	11-12	Elective	80% or ↑ proficiency in Spanish I and II	An intermediate level course which emphasizes a ↑ level of reading and speaking, with emphasis on conversational Spanish and personal survival skills. Several types of writing are required including narrations, persuasion, and personal information. More exposure to Spanish and Latino cultures is given in this course, with an emphasis on Central America. Portfolios are required.
Spanish IV	2 sem	12	Elective	80% or ↑ proficiency in Spanish I, II, and II	A second intermediate level course that involves further development of reading and writing skills in Spanish. Conversation and listening comprehension are emphasized to develop social skills as well as survival skills in Spanish. Advanced grammar structures are introduced, and papers are written using several of these. Reading short stories and poems form a basis for an introduction to Hispanic Literature. Further exposure to Latino culture is given throughout the course. Various projects and portfolios are required.

BUSINESS

Course Title	Length	Grade offered	Required/ Elective	Prerequisite	Description
Introduction to Business (can enter or exit either semester)	2 sem	9-12	Elective		Each of the 4 quarters will deal with a different topic. These topics were chosen because of their importance in our everyday life. Students who major in business in college will encounter these four areas in specific classes. Students who do not major in business will use this knowledge in their everyday life as will those students who do not attend college. Two quarters of General Business – This quarter will deal with how businesses are organized, how one can invest in business. Record management will also be covered. One quarter of Marketing – Marketing is the performance of activities that provide products and services for the satisfaction of consumer needs and wants. This quarter will aid students in developing an understanding of the marketing process and its relation to the free enterprise system. One quarter of Entrepreneurship – This quarter is designed to give all students the self-confidence and presentation skills to effectively organize, develop, manage, and sell a service or product or own a business.
Accounting I	2 sem	10-12	Elective		The emphasis of this course is on the basic principles, concepts, and procedures of accounting that every student must understand if he/she expects to have a maximum opportunity when he/she enters the world of business. The students will learn the basic accounting cycles for businesses ran as a sole proprietorship and as a partnership. Evaluation: daily work, study guides, tests, and an end of the year comprehensive final.
Introduction to Computer Science	1 sem	9-12	Elective		This course is designed to empower students to create authentic artifacts and engage with computer science as a medium for creativity, communication, problem solving, and fun. Using Code.org, students will explore problem solving, app exploration, web development and animations and games. In addition, students will also explore the school's local area network.

Course Title	Length	Grade offered	Required/ Elective	Prerequisite	Description
Accounting II	2 sem	11-12	Elective	Accounting I	This class will focus on enhancing the students' knowledge of the basic accounting concepts. The students will review the sole proprietorship and partnership accounting cycles and will then focus on how to keep accounting records for a corporation. This class will be an independent study and will be taken at the same time as Accounting I students. The student must be trustworthy and able to complete tasks independently. Approval from the business teacher must be obtained before a student can enroll in this class.
Multi Media (can enter or exit either semester)	2 sem	10-12	Elective		This is a course designed to further students' knowledge in the many different aspects of computer media designs. The course will cover the following media designs in the Adobe CS3 Suite: InDesign, Photoshop, Illustrator, and Dreamweaver.
Career Readiness	1 sem	11-12	Required		As a junior/senior, thoughts turn to college or ultimately to a full-time job. Because the job market is tight and getting more so, skills associated with applying for a position has become essential. Knowing a few "tricks of the trade" may help students get that all-important interview among many applicants. At the end of the quarter, juniors/seniors will have hard copies of their current resumes, sample application letters, and interview experience. Students will also learn about being a consumer/worker, both in and out of school. Topics include payroll, banking, insurance, budgeting, investors, credit cards, loans, and federal and state taxes.
Introduction to Computers SWCC class CSC 110 <i>1st semester</i>	1 sem	11-12	Elective	ACCUPLACER scores	This is an introductory course that surveys a variety of topics to include history, hardware, software, terminology, communications, computer ethics and societal impact of computers. In addition to computer literacy, students will complete hands on modules for Microsoft Office programs.

Course Title	Length	Grade offered	Required/ Elective	Prerequisite	Description
Business Computer Applications SWCC class BCA 215 <i>2nd semester</i>	1 sem	11-12	Elective	ACCUPLACER score CSC110	This is a course for experienced computer users. This is an upper level applications course utilizing Microsoft Office programs. Special attention will be given to program integration and applying skills to business situations.
School to Work	1 sem	12	Elective		Diversified Occupations The learner will assess personal interests and skills while participating in a work-based learning situation. Work-release time will be 2-3 times a week and have a weekly review due at the end of each week. Students are expected to have completed prior coursework relating to the area of work study they wish to enroll in. A final project/presentation completes the course.
Workplace Experience - Business	1 sem	12	Elective		Internship at a local business. This course will involve an application process and selection to match students with potential businesses. Students will typically be on the job site in the morning every day.

HUMAN SERVICES -- (FCS)

Course Title	Length	Grade offered	Required/ Elective	Prerequisite	Description
Principles of Human Services	2 sem	9-12	Elective		This is an entry level comprehensive course. This course will cover all areas of family consumer science including independent living, foods, family living, child development, and design. Students will work in the foods lab, sewing lab and work with interior designing. Career exploration is part of this class.
Nutrition and Wellness I	1 sem	9-12	Elective		An instructional program that prepares individuals to understand the basic principles of nutrition; relationships of nutrition and health; the importance of daily food choices; the preparation and services of foods and meal management. Career exploration is part of this class.
Consumer & Personal Finance	1 sem	10-12	Elective		This course will prepare students personal & family decision making skills, spending & saving practices across the life span and learn about management, protection, credit, and debit. Career exploration is part of this class. <u>Potential for college credit through UNI for junior/senior students.</u>
Nutrition and Wellness II	1 sem	9-12	Elective	C or ↑ in Foods I	This course is the second semester of Nutrition and Wellness. This semester will be a more in depth study of similar curriculum. Career Exploration is a part of this course.
Culinary Essentials	2 sem	10-12	Elective	C or ↑ in Nutrition and Wellness I and II	This course will study knife skills, meal planning, menu planning, careers in the food industry, preparation and services of foods, meal management, and foods from around the world. The class might also include marketing products, selling food products, and catering. Students will be given the opportunity to sell their products to the community, as well cater and serve for various functions in the community. Career exploration is part of this class. Students will also gain experience in the Twolf café.
Human Growth and Development I	1 sem	10-12	Elective		This course provides students with an understanding of the aspects of human growth and development across the life span. This course will deal with the physical, emotional, social and intellectual development of a child from conception to adults. Students will explore safety, abuse, moral decision making and prevention of accidents and illnesses. Career exploration is part of this class.
Human	1 sem	10-12	Elective	Human	This course is a continuation of the following concepts of Human Growth and Development

Growth and Development II				growth and development I	I. It is strongly recommended as a pre-requisite to College Psychology 111. This course provides students with an understanding of the aspects of human growth and development across the life span. This course will deal with the physical, emotional, social and intellectual development of a child from conception to adults. Students will explore safety, abuse, moral decision making and prevention of accidents and illnesses. Career exploration is part of this class.
Textile Sciences	2 sem	9-12	Elective		This course introduces students to and expand upon the various aspects of apparel, garment construction, and the textile industry, design principles, production processes, and maintenance techniques. These courses usually address the selection, characteristics, care, and repair of various textiles; operation and care of commercial sewing machines; design, construction, and production of fabrics and/or garments; and career opportunities in the garment or textile industry. This class will run the Twelves shop.
Workplace Experience – FCS	1 sem	11-12	Elective		The focus of this course is to allow student the opportunity to gain on-the-job skills in a Human Service business to either gain knowledge valuable for college courses or prepare students with skills to enter directly into the workplace. This course will involve an application process and selection to match students with potential businesses. Students will typically be on the job site in the morning every day.

AGRICULTURE AND TECHNOLOGY

Students who join FFA must take an Ag class for one semester each year and pay dues to acquire membership; this is a local, state, and national rule.

Course Title	Length	Grade offered	Required/ Elective	Prerequisite	Description
Principles of Agriculture Science and Technology	2 sem	9-10	Elective		This is an introductory course that presents the student with the foundations of agricultural science. Students will develop skills and knowledge in plant science, soil conservation, animal science, natural resource management, and the agricultural mechanics that relate to these life sciences. Students will also learn leadership skills through an introduction to the FFA and supervised agricultural experience program. Students will develop skills building an ag project from wood during second semester after drawing approved plans. Projects are very important to a successful shop experience.
Basic Soil & Plant Management in Ag Science Technology	1 sem	10-12	Elective		A course which starts with the origin and classification of soils and develops knowledge and skills in soil structure and texture as it applies to agriculture today. The student will learn how water quality and soil conservation are related to good soil stewardship. The student will explore the principles of basic plant science and develop knowledge and skills in plant structure, physiology, and reproduction as it relates to agricultural production and principles of horticulture. The student will develop knowledge for different ways to manage crop and forage production and its relationship to government regulations and its effect on the environment.
Basic Animal Science and Technology	1 sem	10-12	Elective		This course helps students develop knowledge and skills in livestock identification and selection, nutrition and feeds, rations, genetics, reproduction, marketing, and disease control. Students will also look at the effects of biotechnology and genetic engineering factors on the livestock industry today. The students will have hands on experience with computers as it applies to animal science.
Advanced Animal Science	1 sem	10-12	Elective	Basic Animal Science and Tech	This course builds on the knowledge learned in Basic Animal Science and Technology.

Course Title	Length	Grade offered	Required/ Elective	Prerequisite	Description
Agricultural Natural Resources	1 sem	10-12	Elective		This course is designed to introduce students to our natural resources and their impact on the agricultural industry. The course will cover soils, soil and water conservation, wildlife management, and wildlife habitat. Students will also study forestry and water quality while bringing it all together as we cover material on environmental issues.
Vet Tech	1 sem	10-12	Elective		This course is designed to allow students the opportunity to learn about veterinary medicine and the general care of companion and food animals. Students will have instruction on general veterinarian and vet technician skills and daily tasks. We also have a couple field trips to the vet clinic or to a livestock farm to attain a better understanding of animal care. As students learn the basics of veterinary medicine they will need to apply that knowledge to reading medicine labels, diagnosing animal health concerns, and communicating effectively with the client. Some hands on dissection will be a part of the curriculum.
Agricultural Business and Management	1 sem	11-12	Elective		1st semester This advanced level course is designed to emphasize both farm and agribusiness management. Learning opportunities will concentrate on the areas of financial and budget analysis, credit, money management, taxes, farm law, sales, and ag business organization and management. Students will have hands on experience with computer programs as they apply.
Principles of Agriculture Business and Sales	1 sem	11-12	Elective		2nd semester This course is designed to give the student a basic knowledge of different agriculture businesses and how they operate. Emphasis will be placed on merchandising and agriculture sales. A number of FFA contests support the classroom activities in this course. The student will have instruction in areas of marketing, purchasing and sale of farm commodities. Students will also develop leadership skills used in agriculture business. This class will also have students look at developing, managing, and operating cooperatives in agriculture.

Course Title	Length	Grade offered	Required/ Elective	Prerequisite	Description
Agricultural Mechanics (Small Engines)	1 sem	10-12	Elective		1st semester This course helps the student develop knowledge and skills in various agricultural mechanic areas. Students will have practical and technical instruction in agricultural construction, preventive maintenance, and small gas engine maintenance. The focus of the ag mechanics class will depend on our students' needs, interests, and availability of projects for the year. Students will need an engine or mechanics project to work on during a part of the class that is instructed in the shop. When available, part of the semester students will be involved with assembling machinery from an agriculture dealership.
Ag Welding	1 sem	10-12	Elective		2 nd Semester This course will cover various aspects of welding and metal identification. Students will gain knowledge and hands-on skills in arc, wire, and oxyacetylene welding techniques, and repair of welding equipment. After about four weeks, students will go to the shop to spend time on required welds and shop projects. Students will need to provide plans for an approved project before starting on the project. Projects are very important after completing required welds.
Horticultural Science and Technology	2 sem	10-12	Elective		This course is designed to present knowledge and skills in the many areas of horticulture. Instruction will be provided in landscaping, gardening, greenhouse management, turf grass management, and floral design. Students will apply knowledge and skills in a hands-on setting to various horticultural situations for class.
Advanced Horticulture / Greenhouse Tech.	1 sem	10-12	Elective	Horticultural Science and Technology (1 Sem)	This class will build off of the knowledge and skills learned and developed in the first level of Horticulture class. Students will implement landscaping skills into projects and manage the majority of the greenhouse processes for the spring plant sale. Students will also practice their landscape design skills on some projects. (Only offered in the Spring)
Entrepreneurship and Job Seeking Skills	1 sem	11-12	Elective		Students will investigate entrepreneurship as a means of starting their own business. These students will gain skills in record keeping, presenting to groups outside the class such as elementary students and local organizations, and proper methods of communication with business leaders. Other opportunities include learning skills to attain a job, maintain a job, and transfer jobs/careers properly by correctly marketing their valuable skills. This class works well for students who are self-starters who utilize problem-solving skills and value volunteerism.

Course Title	Length	Grade offered	Required/ Elective	Prerequisite	Description
Workplace Experience Program	1 sem	11-12	Elective	Application Process	The focus of this course is to allow students the opportunity to gain on-the-job skills in an agriculture related business to either gain knowledge valuable for college courses or prepare students with skills to enter directly into the workplace. This course will involve an application process and selection to match students with potential businesses. Students will typically be on the job site in the morning every day
Agricultural Woodworking	1 sem	10-12	Elective		This course covers basic hand tool and machine operations in the wood/carpentry shop. Shop and machine safety are prioritized and operation of radial arm saws, jointer, table saw, bandsaw, jigsaw, drill press, sanders, lathe, and portable tools will be implemented. First semester consists of required projects aimed at principles of construction, joints, assembly, gluing, clamping, and finish.
Agricultural Construction	1 sem	10-12	Elective	Ag Woodworking	Prepares students to construct and maintain agricultural structures and equipment. Develops basic skills such as: tool identification, interpreting plans, calculating a bill of materials, electrification, carpentry, welding, metal fabrication, plumbing, and masonry.
Leadership in Agriculture	1 sem	10-12	Elective		Agricultural leadership provides an appreciation of agriculture and natural resources with an understanding of leadership theory and its application. Commitment to agriculture, authentic leadership, diversity, critical thinking and professionalism are the five core values behind this course.
Farm and Home Maintenance	1 sem	10-12	Elective		The class will concentrate on an introduction to basic skills needed for anyone planning to own a home in the future. Units included are safety, hand/power tools, blueprint reading, electrical wiring, concrete, plumbing, structural design, and basic drafting. We will complete basic wiring labs on wiring boards and stud walls, PVC and copper pipe structures, concrete blocks, and a variety of household layout plans.
Ag Power and Technology	1 sem	10-12	Elective		Exposes students to mechanics, power, technology, and career options in the world of agriculture. Students participating in the APT course will have experiences in various mechanical and engineering concepts with exciting hands-on activities, projects, and problems. Student's experiences will involve the study of energy, tool operation and safety, material properties, machine operation, and structural components. Students will acquire the basic skills to operate, repair, engineer, and

					design agricultural tools and equipment. (Offered Fall of Odd Years)
Mechanical Systems in Ag	1 sem	9-12	Elective	Ag Power and Technology	Students will expand on knowledge learned in APT to explore the mechanical systems used in agriculture. Students will research, create, build and test mechanical structures. (Offered Fall of Even Years)
Ag Carpentry	1 sem	10-12	Elective	Ag Construction	Students will become familiar with all aspects of carpentry from the foundation to the roof including: framing, siding, roofing, and interior design. Students will use previous learned knowledge to build a larger project. (Limited to 8 students)

MUSIC

Course Title	Length	Grade offered	Required/ Elective	Prerequisite	Description
Band	2 sem	9-12	Elective		The main purpose of the band program is to provide the students with a level of musicianship above and beyond the normal music education courses. The band program gives students the chance to master an instrument they currently play, and also provide opportunities for them to learn new instruments, if so desired. Leadership, teamwork, discipline, and pride are all components of the band program. Required curriculum of the band program includes marching band, concert band, pep band, and solo/small ensemble group work. Depending on interest and numbers, students may have the opportunity to participate in jazz band and color guard.
Concert Choir	2 sem	9-12	Elective		Concert choir is a performance-oriented group open to all grades. This course provides a means for students to demonstrate music skills and knowledge developed in general music classes. The concert choir uses a repertoire of quality music literature in a wide range of styles. Through performance, students become a part of something much larger than themselves in the context of working together to accomplish a group goal. The concert choir performs four required events, including a Pops Concert and State Large Group Contest. Other performance possibilities for concert choir members are POI Conference Honor Choir, State Solo/Ensemble Contest, private lessons, All State auditions, National Anthem Singers and musical.
Music Appreciation	1 sem	9-12	Elective		In this course we will discover how music shapes our lives. We will cover the basics of music, music history, world music, and even

					modern pop music. By the end of this class you will have a better understanding of the complexity and art of music.
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Art

Course Title	Length	Grade offered	Required/ Elective	Prerequisite	Description
Applied Art	1 sem	9-12	Elective		This semester course in the study of the 7 elements of art throughout a variety of mediums such as: drawing, painting, printmaking, weaving and or course work that may include community and school projects requested by various groups.
Drawing 1st Semester	1 sem	9-12	Elective		This semester course will work on the fundamentals of drawing using a variety of mediums such as: pencil, colored pencil, pastels and or ink. Several drawing techniques like: contour, perspective, gridding, blending and shading will be studied on many different subjects.
Painting 2nd Semester	1 sem	9-12	Elective	Drawing	This semester course will concentrate on the theory of color using a variety of medium such as: watercolor, oil/soft pastels, ink acrylic and or digital painting. Students who enroll should have successfully completed a drawing class.
Ceramics I	1 sem	9-12	Elective		This semester course will focus on variety of 3 dimensional projects. Ceramics will focus on potter's wheel and hand building (pinching, coiling and slab construction) projects. Sculpture will focus on additive and subtractive technique using wire, plaster, paper mache, and or found objects.
Ceramics II	1 sem	9-12	Elective		This course is the continuation of Ceramics I.
Media	Year	11-12	Elective		Media's main activity is the creation of the yearbook. This course is primarily for advanced English and/or advanced art students. Because of the high-pressure nature of the class, a limited number of students will be involved each semester (8-12 students).
Printmaking	1 sem	9-12	Elective		A studio course designed produce works of art throughout the use of monotypes, relief, serigraphy and intaglio printmaking techniques.
Art I	1 sem	9-12	Elective		This introductory studio course is a one semester elective that will prepare the student for further high school art experiences. The student will be introduced to skills and media that are utilized in the other art electives including: drawing, painting, ceramics, the elements and principles of design, color theory, the critical process, and keeping a sketchbook journal.
Art II	1 sem	9-12	Elective		This is a continuation of the knowledge and skills learned in Art I

Physical Education

Course Title	Length	Grade offered	Required/ Elective	Prerequisite	Description
Physical Education	1 sem	9-12	Required		The class will be a combination of: Weightlifting, Cardiovascular and Endurance Training, Lifetime Activities, Competitive Activities, Team Sports, Leisure and Outdoor activities, Physical Testing.
Health	1 sem	9	Required		The course will emphasize the importance of personal responsibility in health and wellness. It will focus on personal decision making in fitness, nutrition, and weight control, as well as aging and health. Improving and maintaining quality of life through health and healthy decisions is ongoing theme throughout this course.
Health II	1 sem	10-12	Elective Will also fulfill the Health I requirement	Open to all students as an elective. May take even if have already taken Health I.	The course will be an extension of Health and Wellness I. It will continue to emphasize the importance of personal responsibility in health and wellness. It will focus on personal decision making in fitness, nutrition, and weight control, as well as aging and health. Improving and maintaining quality of life through health and healthy decisions is ongoing theme throughout this course.
Weight Training	1 sem	9-12	Elective		Weight lifting and training for appropriate physical fitness and toning is the main focus of this course.

SPECIAL EDUCATION

Course Title	Length	Grade offered	Required/ Elective	Prerequisite	Description
Study Skills	2 sem	9-12			An individualized class designed by the student and the IEP team to match the learning style of the student. Individual and/or small group instruction is provided. The student must qualify by federal, state, and local standards in order to receive services. This class is required for all IEP students unless the student is already enrolled in a special class or special arrangements have been made. The course will be structured as a pass/fail grade and will not affect the student's GPA.
Experience-Based Career Education (EBCE)		11-12			This is an arranged program on recommendation of IEP team. This class is an individualized introduction to the world of work, taught cooperatively by local teachers and Area Education Agency staff. Students are placed on local job sites to gain an understanding of the variety of tasks involved in different career areas. Four to six job sites may be experienced per year. Job sites are attended two – three days a week.

SENIOR YEAR PLUS

Current legislation under Senior Year Plus allows students rigorous academic options during high school, for which students passing with a C or \uparrow also earn college credit. Southwest Valley High School offers Concurrent Enrollment, Independent Online Learning, and Career Academies through agreements with Southwestern Community College (SWCC).

Any student signed up for a college credit class, whether it is taught on Corning High School campus or online, must meet all of the entry requirements of Southwestern Community College. The students must have a qualifying ACCUPLACER score predetermined by the community college or an ACT test score of 19. Students can register for the ACCUPLACER exam in the high school counselor's office. Students enrolled in college-credit courses must also abide by an attendance policy, as established in concordance with college course standards. Students are allowed to take up to 23 credit hours per year through one educational institution.

Students who wish to pursue other options for college credit can pursue the Post-Secondary Enrollment Option (PSEO). *If a student does not successfully complete a PSEO course, the student will be held financially responsible for all tuition, books, and fees, typically totaling around \$500.*

CONCURRENT ENROLLMENT REQUIREMENTS:

Southwest Valley students have the opportunity of completing several college credit courses while enrolled as high school students. The following must be completed before admission into college classes:

1. Apply to Southwestern Community College (done online).
 - a. Go to www.swcciaowa.edu
 - b. Click the big APPLY button on the right side of the page.
 - c. Click on **Application for Admission—High School Student**
 - d. Complete the application: you will need to enter your social security number and birth date.
2. Complete SWCC registration paperwork through the high school counselor's office.
3. Students must have a completed ACCUPLACER testing at SWCC with required range score or have an ACT score (19 or \uparrow on file) that meets eligibility range.

The following courses **are taught in-house by master's level instructors** and students earn both high school and college credit through a contractual agreement with Southwestern Community College. Students can enroll in a **MAXIMUM** of 23 credits **per year** (includes courses taught by SWV instructors, SWCC instructors, AND online classes).

Course number	Course name—all are a semester, 3 SWCC credits except Calculus classes—4 SWCC credits
ENG 105	Composition I
ENG 106	Composition II
ENG 221	Creative Writing (NOT offered Fall 2018)
MAT 120	College Algebra—taught on site by SWCC instructor
MAT 156	Statistics—taught on site with SWCC instructor
MAT 210	Calculus I—taught by SWCC instructor (off site)
MAT 216	Calculus II—taught by SWCC instructor (off site)
CSC 110	Introduction to Computers
BCA 215	Computer Business Applications
LIT 101	Introduction to Literature

SWCC online classes: Students are allowed to enroll in online classes offered through the Southwest Valley CSD contract agreement with Southwestern Community College. The registration process is the same as concurrent classes taught at the high school. The contracted courses are listed on the following table.

Juniors (11th), seniors (12th) and any identified TAG students are allowed to take these courses **outside of the school day**. This means that students will still be expected to enroll in 8 courses at the high school in addition to their elected online SWCC courses.

Online classes will be added to the schedule after all required high school classes are scheduled. Only one online class per semester may be enrolled in on the *first attempt* of a SWCC online class. If a student wishes to take more than one online class on the first attempt, the parent and student must sign a SWCC “Acceptance of Responsibility” form.

SWCC online classes:

Course number	Course name
ART 101	Art Appreciation
BIO 151	Nutrition (pre-requisite high school chemistry)
BIO 162	Essentials of Anatomy and Physiology (pre-requisite H.S. Biology and Chemistry)
BUS 102	Introduction to Business (ACCUPLACER writing score 69 or above)
BUS 121	Business Communications (College English or Placement Writing Score)
BUS 161	Human Relations
CSC 110	Introduction to Computers (General Keyboarding Skills)
ECE 103	Introduction to Early Childhood Education
EDU 213	Introduction to Education (ENG 105 highly encouraged)
GEO 121	World Regional Geography
HIS 110	Western Civilization: Ancient to Early Modern
HIS 111	Western Civilization: Early Modern to Present
HIS 152	U.S. History Since 1877
HIS 268	American Experience in Vietnam
HSC 114	Medical Terminology
LIT 178	Mythological and Biblical Literature
LIT 101	Introduction to Literature
MGT 101	Principles of Management (pre-requisite BUS 102)
MGT 110	Small Business Management
MUS 100	Music Appreciation
MUS 204	History of Rock and Roll
PSY 121	Developmental Psychology
PEC 108	Sports and Society
PSY 111	Introduction to Psychology
SOC 110	Introduction to Sociology

Other online courses as approved by both SWV high school and SWCC.

Course descriptions can be found on the SWCC website.

SWV high school does not provide or pay for summer college courses.

The following few pages introduce the Career Academies that are offered for Southwest Valley students through Southwestern Community College.

CAREER ACADEMY—SWCC concurrent enrollment—offered *off* the high school campus. Students expected to provide their own transportation to the educational site (hospital for the Health Careers and SWCC for the other academies—unless designated SWV campus).

Link to courses: http://www.swcciowa.edu/downloads/Academics/Catalog_2017-2019_webv1.pdf

Health Career Academy (11th grade status)

Courses		
Intro to Health Occupations	HSC 110	English Composition I (SWV campus)
Medical Terminology	HSC 114	Nurse Aide I HSC 172
College Speech	SPC 101	Pharmacology Basics PNN 208
Intro to Psychology	PSY 111	English Composition II (SWV campus)

Health Career Academy will be provided through Southwestern Community College and will be concurrent credit.

HEALTH SCIENCE

Year 1- Fall

HSC 110 Introduction to Health Occupations 3 credits

This course is designed to offer students an opportunity to explore health-related professions.

HSC 114 Medical Terminology 3 credits

This course will aid in the student's understanding of core medical terms. Attention will be given to prefixes, suffixes and root words used in the medical field. Exercises stressing the spelling, pronunciation, and usage of medical terms are included.

Year 1- Spring

HSC 172 Nurse Aide 3 credits

Prerequisites: HSC 110 Introduction to Health Occupations and criminal background check. This course builds upon the topics in HSC 110 Introduction to Health Occupations. Students will complete the 75 Hour Nurse Aide training and will be eligible for certification testing.

PNN 208 Pharmacology Basics 3 credits

Recommended for pre-nursing students. This course enables the student to learn basic principles of drug therapy, including related terminology and legislation, drug properties, and the care provider's role and responsibility for the patient receiving drug therapy.

Computer Science-Information Tech Systems Networking Career Academy

Year One	Courses	Year Two
Computer Hardware Basics	NET 122	Composition I ENG 105
Operating Systems Software	NET 132	Introduction to Computers CSC 110
Introduction to Robotics		Introduction to Programming
Networking	NET 852	Logic CIS 121
PC Operating Systems	CIS 650	Implementing Windows
		Network Infrastructure NET 333
CISCO Networking	NET 212	

INFORMATION TECHNOLOGY SYSTEMS NETWORKING

Year 1- Fall

NET 122 Computer Hardware Basics 3 credits

Students will be trained to properly install, configure, upgrade, troubleshoot, and repair microcomputer hardware. This will include having basic knowledge of desktop and portable systems, basic networking concepts, and printers. Students will also be asked to demonstrate knowledge of safety and common preventive maintenance procedures. This course will prepare students to take Comp TIA's A+ Certification exam.

NET 132 Operating Systems Software Basics 3 credits

Students will be expected to demonstrate knowledge of DOS, Windows 3.x, and Windows 95 for installing, configuring, upgrading, troubleshooting, and repairing microcomputer systems. Emphasis will be placed on: function, structure, operation, and file management; memory management; installation, configuring, and upgrading; diagnosing and troubleshooting; and networks. This course will prepare students to take Comp TIA's A+ Certification exam.

NET 852 Introduction to Robotics Networking 3 credits

This course is designed as a general introduction to robotics programming. Students will work in teams to design, build, and program robots with Bluetooth/wireless technology.

Year 1-Spring

CIS 650 PC Operating Systems 3 credits

A course in resource and file management on small computer systems. The course will survey techniques used to manage secondary storage. The students will also learn the nuances of installing and managing resources and users in a PC environment. An in-depth study will be made of drivers, controllers, and external and internal operating system commands. Rudimentary introductions to the registry, batch programming, and system programming with other languages will also be included.

NET 212 CISCO Networking 3 credits

The course addresses the latest skills needed by network technicians, such as basic principles on how to install, upgrade, troubleshoot, and secure networks. The course covers network technologies, media and topologies, devices, management, tools, and security. This course will assist in preparing students for a career in network support or administration or academic training, while also preparing them for the CISCO CCENT-1 Certification.

Year 2- Fall

ENG 105 Composition I 3 credits

This is an intensive writing course designed to develop skills in the use of language, clear thinking, critical reading, and effective writing within an essay format. Special emphasis will be placed on development of content, clear organization, sentence 105 and paragraph structure, and correctness in usage, grammar, and mechanics. Research documentation is introduced.

CSC 110 Introduction to Computers 3 credits

Prerequisite: Keyboarding skills. This is an introductory course that surveys a variety of topics to include history, hardware, software, terminology, communications, computer ethics, and societal impact of computers. In addition to computer literacy, students will complete hands-on modules for Microsoft Office programs.

Year 2 –Spring

CIS 121 Introduction to Programming Logic 3 credits

This course will provide a basic understanding of problem-solving concepts. The course explains the logic behind storing and moving data and the programming logic required to 97 meet the needs and parameters of end users and the systems they utilize.

NET 333 Implementing Windows Network Infrastructure 3 credits

This course provides students with the knowledge and skills to implement, manage, and maintain a Microsoft Windows Server 2003 network infrastructure. The course is intended for systems administrator and systems engineer candidates who are responsible for implementing, managing, and maintaining server networking technologies. These tasks include implementing routing; implementing, managing, and maintaining Dynamic Host Configuration Protocol (DHCP), Domain Name System (DNS), and Windows Internet Name Service (WINS); securing Internet Protocol (IP) traffic with Internet Protocol security (IPSec) and certificates; implementing a network access infrastructure by configuring the connections for remote access clients; and managing and monitoring network access.

Automotive Repair Technology Career Academy

Year One		Courses	Year Two	
Intro to Auto Tech	AUT 104	Auto Engine Repair	AUT 163	
Automotive Brake Systems	AUT 503	Adv Auto Engine Repair	AUT 173	
Auto Suspension & Steering	AUT 404	Auto Fuel Systems	AUT 834	
Basic Auto Electricity	AUT 603	Adv Auto Brakes & Alignment	AUT 535	
Adv Auto Electricity	AUT 652	Auto Elec. Engine Controls	AUT 844	
Auto Heating & Cooling	AUT 704			

Descriptions on next page:

AUTOMOTIVE REPAIR TECHNOLOGY

Year 1- Fall

AUT 104 Introduction to Automotive Technology 3 credits

This course provides instruction in the selection and use of mechanics tools and precision measuring devices. Practical, hands-on activities with automotive engines and shop safety will be emphasized.

AUT 503 Automotive Brake Systems 3 credits

Prerequisite: AUT 104 Introduction to Automotive Technology. This course will provide instruction in the theory of operation and service procedures of automotive braking systems.

Year 1- Spring

AUT 404 Automotive Suspension & Steering 4 credits

Prerequisite: AUT 503 Automotive Brake Systems. This course will provide instruction in the theory of operation and service procedures of automotive alignment and suspension systems.

AUT 603 Basic Automotive Electricity 3 credits

Prerequisite: AUT 104 Introduction to Automotive Technology. This course will provide instruction in theory and operation of automotive electrical circuits. Safety, meters, and service information will be emphasized.

AUT 652 Advanced Automotive Electricity 3 credits

Prerequisite: AUT 603 Basic Automotive Electricity. This course is designed to provide instruction in the diagnosis, repair, and service of electrical and electronic components found on current vehicles.

AUT 704 Automotive Heating & Air Conditioning 4 credits

Prerequisite: AUT 652 Advanced Automotive Electricity. This course will provide instruction in the theory of operation of auto air conditioning and heating systems. Students will learn how to diagnose and service auto air conditioning and heating systems.

Year 2- Fall

AUT 163 Automotive Engine Repair 3 credits

Prerequisite: AUT 104 Introduction to Automotive Technology. This course will provide instruction in the theory and operation of the four stroke automotive engine. Students will gain hands on experience in a lab setting learning how to service and repair cylinder heads.

AUT 173 Advanced Automotive Engine Repair 3 credits

Prerequisite: AUT 163 Automotive Engine Repair. This course is designed to provide the student with instruction in the proper diagnosis and repair of engine malfunctions. Students will learn diagnostic procedures using modern, high tech equipment and will flow through with the actual adjustments and repairs of defective components and assemblies in a supervised lab setting.

Year 2- Spring

AUT 834 Automotive Fuel Systems 4 credits

Prerequisite: AUT 163 Automotive Engine Repair. This course will provide the instruction to introduce the student to basic fuel system principles. Students will study theory and will gain hands-on experience by cleaning, repairing, and adjusting automotive fuel systems.

AUT 535 Advanced Automotive Brakes & Alignment 5 credits

Prerequisite: AUT 404 Automotive Suspension and Steering. This course is designed to require the student to build on and apply the knowledge and skills gained in AUT 503 Automotive Brake Systems and AUT 404 Automotive Suspension and Steering. Through supervised lab experiences, students will study advanced techniques in the diagnosis, service, and repair of brake and suspension systems.

AUT 844 Automotive Electronic Engine Controls 6 credits

Prerequisites: AUT 652 Advanced Automotive Electricity and AUT 834 Automotive Fuel Systems. This course is designed to require students to apply knowledge and skills gained in AUT 603 Basic Automotive Electricity, AUT 652 Advanced Automotive Electricity, and AUT 834 Automotive Fuel Systems. Through supervised labs, students will experience hands-on diagnosis and repair of the computers, sensors, and control devices of late model cars.

Electrical Technology

Year One	Courses	Year Two	
Introduction to Wiring	ELE 178	National Electrical Code 1	ELE 155
Technical Math	MAT 743	Residential Electrical Services	ELE 207
Blueprint Reading	ELE 116	DC Theory	ELE 177
Blueprint Reading	ELE 174	Motor Control	ELE 195
Advanced Wiring Systems	ELE 179		

ELECTRICAL TECHNOLOGY Career Academy

Year 1- Fall

ELE 178 Introduction to Wiring 3 credits

This course will focus on the various career paths and/or opportunities in the electrical profession. The different sectors of the electrical industry will be discussed. The course will examine the variety of tasks typically performed by electricians as well as studying the responsibilities and aptitudes of those in the electrical profession. This course will examine the different types of nonmetallic and metallic device boxes available, how to determine the appropriate box for a given application and the appropriate method for mounting device boxes. Identifying and selecting various types and sizes of raceways and fittings will be discussed along with the different methods of installing raceways. Methods of bending and installing conduit will be examined. Finally, the course will examine the allowable ampacity of a conductor for a given application and installing conductors in a raceway system.

MAT 743 Technical Math 3 credits

Applied mathematics skills are reviewed and concepts in measurement, basic algebra, graphs, geometry, and trigonometry are covered.

Year 1- Spring

ELE 116 Blueprint Reading 3 credits

This course will examine the basic layout of a set of construction drawings and identify the types of lines. Students will be trained to use an architect's scale, interpret electrical drawings, interpret equipment schedules, and describe the type of information included in electrical specifications.

ELE 174 Blueprint Reading 3 credits

Prerequisite: ELE 116 Blueprint Reading. This is a training course for those who wish to learn the basic principles of commercial/industrial blueprint reading with a strong emphasis on electrical construction. This course develops an understanding of various rules and guidelines for the makeup of construction blueprints. The prints are then referred to, interpreted, and put into real world applications.

ELE 179 Advanced Wiring Systems 3 credits

Prerequisite: ELE 178 Introduction to Wiring. The course will cover the process of conduit bending using electric and hydraulic benders and the types of bends. Identification, selection, and installation of pull and junction boxes will be discussed. Setting up and planning a cable pulling operation along with learning to install a pull line will be examined. The course will cover the components of a cable tray assembly and how cable enters and exits a cable tray. The preparation of cable ends for terminations and splices and connections using lugs or connectors will be covered. The operation of a circuit breaker and the necessity of overcurrent devices in electrical circuits is an essential part of this course.

Year 2- Fall

ELE 155 National Electrical Code I 2 credits

This course will focus on a review of the National Electrical Code®. The students will learn the layout of the NEC® and be able to navigate through it quickly.

ELE 207 Residential Electrical Services 3 credits

The course will focus on the grounding requirements of a residential electrical service, calculating, and selecting service entrance equipment, and selecting the proper wiring methods for various types of residences. The course will also cover computing branch circuit load requirements. The types and purpose of equipment grounding conductors and the purpose of ground fault circuit interrupters will be discussed. The course will examine the installation regulations for electrical systems around swimming pools, spas, and hot tubs as well as the rules for installing electrical space heating and HVAC equipment. The operation of the following testing equipment will be covered: voltmeter, ohmmeter, clamp-on ammeter, multimeter, megohmmeter, motor and phase rotation testers.

Year 2 - Spring

ELE 177 DC Theory **3 credits**

This course will focus on the inter-relationship between current, voltage, resistance, and power in a direct current electric circuit.

Series, parallel, and combination circuits will be explored in depth using Ohm's laws, Kirchoff's laws and the power wheel.

ELE 195 Motor Control **3 credits**

This course discusses motor controls, components, operation, and service. Students will learn electric relay control of AC and DC motors along with troubleshooting motors in an industrial application.

Carpentry/Building Trades Career Academy

Year One		Courses	Year Two	
Basic Construction Skills	CON 141	Construction Lab IIA	CON 188	
Construction Lab IA	CON 183	Carpentry Level IIA	CON 237	
Carpentry Level I	CON 155	Construction Lab IIB	CON 189	
Construction Lab IB	CON 184	Carpentry Level IIB	CON 267	

CARPENTRY/BUILDING TRADES

Year 1- Fall

CON 141 Basic Construction Skills **2 credits**

This course provides students with the basics in construction including math, safety, blueprint reading, hand and power tools, employability skills, and materials handling.

CON 183 Construction Lab IA **5 credits**

This course provides students a hands-on application in the basics in construction including math, safety, blueprint reading, hand and power tools, employability skills, and materials handling.

Year 1- Spring

CON 155 Carpentry Level I **3 credits**

This course will provide a fundamental overview of the carpentry trade. Students will gain a basic knowledge of construction materials, hand and power tools, and rough framing. Other course topics include plan reading, window and exterior door installation, and basic concrete practices.

CON 184 Construction Lab IB **5 credits**

This course provides hands-on experience in the construction of a residential home. Students will demonstrate basic knowledge of construction materials, hand and power tools, rough framing, plan reading, window and exterior door installation, and basic concrete practices.

Year 2- Fall

CON 188 Construction Lab IIA **5 credits**

This course provides hands-on experience in the construction of a residential home. Students will apply knowledge and skills in roofing applications, thermal and moisture protection, exterior finishing, and cold-formed steel framing.

CON 237 Carpentry Level IIA **3 credits**

Carpentry Level IIA is designed to provide the students with knowledge, information, and skills in preparation to handle the work requirements in the construction trades. The intent of this course is to provide students with knowledge and skills in roofing applications, thermal and moisture protection, exterior finishing, and cold-formed steel framing.

Year 2- Spring

CON 189 Construction Lab IIB **5 credits**

This course provides hands-on experience in the construction of a residential home. The intent of this course is to provide students with the knowledge to install and finish drywall, install doors and windows, install suspended ceilings, and install cabinets.

CON 267 Carpentry Level IIB **2 credits**

Carpentry Level IIB is designed to provide the students with knowledge and information in preparation to handle the work requirements in the construction trades. The intent of this course is to provide students with the knowledge in drywall installation and finishing, installation of doors and windows, the installation of suspended ceilings, as well as the installation of cabinets.