

High School Course Listings

RECOMMENDED ACADEMIC PLANNER

SJCS Grades 9-12 Academic Program Planner		
Student Name:		
School Year:		
9th Grade		
Required to pass the Missouri Constitution test	Bible: Bible 9	Math:
	English: Language 9	Social Studies:
	PE: PE (.5)	Elective: Spanish I
	Health: Health (.5)	
	Science: Physical Science	
Credits		7
School Year:		
10th Grade		
	Bible: Bible 10	Fine Arts: Art, Band or Choir
	English: Language 10	Elective: Spanish II
	Math:	Elective:
	Science: Biology	Elective:
Credits		7
School Year:		
11th Grade		
	Bible: Bible 11 (.5)	Bible/Practical Arts: Life Shaping Decisions (.5)
	English: Language 11	Science: Chemistry or Physics
	Math:	Elective:
	Social Studies: US History	Elective: Online College Class
	Credits	
School Year:		
12th Grade		
Required to pass the US Constitution Test	Bible: Bible 12	Practical Arts: Personal Fin. (.5)
	English: Language 12	PE: Lifetime Fitness (.5)
	Social Studies: 20 th Century (.5)	Elective (Math):
	Social Studies: US Government (.5)	Science: Chemistry or Physics
		Elective: Online College Class
Credits		7
Total Credits		28

Classes in *italic bold* are courses that are required for students to enroll in for that year. Other courses listed are suggested courses that will prepare a student for college readiness and complete the Show-Me Scholars Program. If a student is interested in a specific subject area, they are encouraged to enroll in courses in those areas.

GRADUATION REQUIREMENTS

Subject Area	SJCS Requirements	Missouri Minimum Requirements
English	4	4
Mathematics ♠	3	3
Social Studies ♣	3	3
Science ♥	3	3
Fine Arts	1	1
Practical Arts *	1	1
PE	1	1
Health	.5	.5
Foreign Languages	-	-
Bible	4	-
Electives	5.5	7.5
Total	26	24
Community Service	40 Hours	-

Students must pass the US and MO Constitution Test taken in history class.

♠ -- Credits must include Algebra I (1)

♣ -- Credits must include US History (1) & US Government (.5)

♥ -- Credits must include Biology (1)

♦ -- Any two courses in foreign language, English, math, social studies, science or fine arts.

(Recommend two foreign languages)

* -- Credits must include Personal Finance (.5)

Schedule for an Eight-Period Day

Forty-eight-minute classes with four-minute breaks between classes.

First Hour	8:00 -- 8:47 AM
Second Hour	8:51 -- 9:38 AM
Third Hour	9:42 -- 10:29 AM
Fourth Hour	10:33 -- 11:20 AM
Jr. High Lunch / Fifth Hour	11:24 -- 11:46 PM / 11:24 -- 12:11 PM
High School Lunch/ Fifth Hour	11:50 -- 12:37 PM / 12:11 -- 12:37 PM
Sixth Hour	12:41 -- 1:28 PM
Seventh Hour	1:32 -- 2:19 PM
Eighth Hour (Study Hall)	2:23 -- 3:10 PM

235 minutes of class time per course/week

7,830 minutes/year = 1 Carnegie unit (credit)

MATH TRACKS

As students plan for what math courses to enroll in, there are four different tracks as suggested by the math program for which students should take in consideration. When planning, students should consider their career interest and which courses will best help them prepare for plans after high school. It is strongly recommended students and parents consult with their math teacher and academic counselor before selecting a track.

Traditional / Basic:

7th Regular math / 7th Regular math

8th Pre Algebra / 8th Pre Algebra

9th Algebra I / 9th Algebra Essentials

10th Geometry / 10th Geometry Essentials

11th Algebra II / 11th Consumer Math

12th Adv math / 12th none

Accelerated / Advanced: (teacher recommendation required)

7th Pre Algebra / 7th Pre Algebra

8th Algebra I / 8th Algebra I

9th Algebra II / 9th Geometry

10th Advanced Math / 10th Algebra II

11th College Alg/Trig / 11th Advanced math

12th Calculus / 12th College Alg/Trig

SCIENCE PATHWAY

As students plan for what science courses to enroll in, there are four different science career pathways students should take into consideration as suggested by the science program. When planning, students should consider their career interest and which courses will best help them prepare for plans after high school. It is strongly recommended students and parents consult with the science teacher and the counselor before selecting a pathway.

Standard / College Readiness:

Physical Science / Biology

Biology / Chemistry I

Advanced Biology / Physics

Health & Medicine Careers / Engineering & Math:

Biology / Physical Science

Advanced Biology / Biology

Anatomy / Chemistry I

Chemistry I / Chemistry II

Chemistry II / Physics

SHOW-ME SCHOLARS

The Show-Me Scholars program is a course of study that encourages students to take more demanding classes in high school. The curriculum provides an education that better prepares students to enter in a college. The Show-Me Scholars Initiative is endorsed by the Missouri Department of Education, the Missouri Chamber Federation, and many of the education coalitions around the state.

To become a scholar, students must complete the Show-Me Scholars Core Course of Study, which includes the following:

English - 4.0

(English I, English II, English III, English IV)

Mathematics - 4.0 (*Beginning with the class of 2018*)

(Algebra I, Geometry, Algebra II; If skipping geometry, you must complete Advanced Math)

Science - 3.0

(Biology, Chemistry, Advanced Lab Science - *Physics suggested*)

Social Studies - 3.5

(Chosen from U.S. and World History, Geography, Economics and Government)

Personal Finance is classified as an economics requirement

Languages other than English - 2.0

(Two credits of the **same language**)

In addition, scholars must complete 20 (*50 hours of community service starting with the class of 2018*) hours of community service, earn at least a C in all Show-Me Scholars classes, finish all the state's requirements for a high school diploma, maintain attendance requirements identified by their local school districts and stay out of trouble. Students who violate the Missouri Safe Schools Act cannot participate in the program.

In return, students earn special recognition, receive a medallion to wear at graduation, and can qualify for additional Pell Grant money. Plus, research suggests that students who complete a rigorous course of study score higher on the ACT and SAT than their peers and are more likely to attend and succeed at a college or university. You can find more information about the program at www.showmescholars.com.

COURSES

Bible

How to Study the Bible

Grade 9

Course No. BIM020 0.5 Credit Hour

Prerequisite: *None*

This course involves the book by book study of the general message of each of the 66 books of the Bible. It is intended to equip the student to not only identify and locate the books of the Bible, but with confidence navigate themselves around the scriptures. The goal of the course is the how to in studying scripture and application thereof. Special attention will be given to book, subject, and character studies in order to lay the foundations for future SJCS coursework. Students will be exposed to and utilize reference tools, such as Bible concordances, Bible commentaries, and Bible dictionaries. Specific emphasis will be given to the books of Genesis and Matthew.

Servant Leadership

Grade 9

Course No. BIH 014 0.5 Credit Hour

Prerequisite: *None*

The purpose of this course is to cultivate an understanding of servant hood and to challenge the student to take a biblically sound servant leadership role in today's world. Leadership will be understood *as* servant hood. Leadership qualities will be extracted from the life of Christ and other model examples, with the goal of application to one's own life. The focus is on serving in order to develop the epitome of Christ in leadership.

Church History

Grade 10

Course No. BIH 013 0.5 Credit Hour

Prerequisite: *None*

This course will examine the development and growth of the church, beginning with Old Testament revelation and forerunners leading up to the Day of Pentecost, continuing to the modern-day church. Special attention will be given to key figures related to church history, an examination of how the Bible came to be canonized, and the survival and growth of the persecuted church. A historical timeline will be developed correlating church and secular history.

Spiritual Formation

Grade 10

Course No. BIH 009 0.5 Credit Hour

Prerequisite: *None*

This course engages students in the development of knowing God and doing His will. It examines the spiritual dimension of moving from fact, to faith, to experience. Spiritual formation is the activity of the Holy Spirit which molds our lives into the likeness of Jesus Christ. This likeness is one of deep intimacy with God and genuine compassion for all of creation. The Spirit works not only in the lives of individuals, but also in the church, shaping it into the Body of Christ. We cooperate with this work of the Spirit through certain practices that make us more open and responsive to the Spirit's touch. This includes such disciplines as Sabbath keeping, works of compassion and justice, discernment, worship, and hospitality. The goal of this course is to equip the student with necessary tools, engaged within the essential framework of scripture, to promote spiritual growth.

Christian Living (Career Ed)

Grade 11

Course No. BUH 800 0.5 Credit Hour

Prerequisite: *None*

This course is intended to challenge young adults with the biblical concept of career stewardship and to give them the resources to wisely and faithfully build their own career plan. Students will use the *Career Direct* assessment and develop an action plan to discover possible college major/career plan options suited to their personal design. *This course is required for all juniors.*

Bible Doctrines

Grade 11

Course No. BIH 011 0.5 Credit Hour

Prerequisite: *None*

Doctrines of scripture will be examined that are paramount to the Christian faith. While it is understood that there will be denominational differences, it is vital that we as Christians are firmly grounded in the doctrines that hold us together as the body of Christ. Students will explore basic doctrines, such as salvation, the sin nature of man, God, Christ, etc.

Developing a Biblical Worldview

Grade 12

Course No. BIH 010 0.5 Credit Hour

Prerequisite: *None*

This course is designed to train students to recognize counterfeit truths of historical and postmodern non-Christian worldviews and be able to compare them to a Christian worldview. Students will examine the biblical worldview and the tenants of non-Christian worldview systems such as naturalism/materialism, deism, dualism, and pantheism. These worldview systems will be examined in the fields of theology, philosophy, ethics, psychology, politics, history, and culture. Each worldview in the fields will be analyzed by Scripture. The goal of this course is to equip students to defend their faith through the development of thinking and behaving biblically.

Missions

Grade 12

Course No. BIM 010 0.5 Credit Hour

Prerequisite: *None*

The goal of this course is to encourage, inspire, and exhort students to develop a passion for the glory of God, his will to be fulfilled in their lives, and his fame to be spread throughout the earth. It is to help students develop a love for God's creation which includes all mankind. The course equips students to grow spiritually, to minister to others, and to share the Gospel of Christ. The course will examine God's missionary activity throughout the Bible, historical missionary activity, the doctrines of Christ, Salvation, and the Kingdom of God, personal evangelism and ministry, and spiritual disciplines. Students will be encouraged to participate in world missions through prayer, giving, sending, or being sent.

Business

Multimedia & Web Design

Grades 11, 12

Course No. BUH420 1.0 Credit Hour

Prerequisite: *Keyboarding skills, GPA of 3.0 or higher in Language Arts, Instructor approval*

Students in this course will learn to create and maintain web pages. Students will gain experience in using WordPress, html coding, and graphics, and sound video editing.

Personal Finance (Per Fin)

Grade 11, 12

Course No. BUH500 0.5 Credit Hour

Prerequisite: *None*

Students will learn the components of income and managing financial income through financial planning and budgeting. Students will be required to create a personal budget and apply it to their current situation. Students will also learn the concepts of savings and investing, giving, insurance, spending and credit as well as comparison shopping. The focus will be for students to look at what God's Word says about financial responsibilities and equip students with the skills and knowledge needed to make sound financial decisions for life.

Yearbook (Year)

Grades 9, 10, 11, 12

Course No. LAH300 1.0 Credit Hour

Prerequisite: (*Application and teacher recommendation*)

Students will supervise the production of the school yearbook. It is a course study of Journalistic Writing, Photography, Computer Layout and Creative Design, Advertisement and Deadline Management.

Fine Arts

Art (I, II, III, IV)

Grades 9, 10, 11, 12

Course No. ARH100-400 1.0 Credit Hour

This is a flexible Art course allowing for all skill levels and building in successive years of instruction. The main focus is two-dimensional (Drawing, Painting, and Design). Printmaking and sculpture will be introduced. These three units of study will include many lessons:

Drawing- shading techniques, contours, proportion, 1-and-2 point perspective, foreshortening, figure drawing, portraits, and still life.

Painting- color studies including monochromatic, analogous and complementary, brush techniques, for watercolor and acrylic on canvas. Students will paint a landscape from photos taken in our region.

Design- explore the elements and principles of design, study negative and positive shapes, create a tessellation, collage, abstract and non-objective designs.

Art materials to include: pencil, charcoal, conte, pastels, marker, scratchboard, watercolor, acrylics, linoleum block printing, and clay sculpture. Weekly sketchbook required and study of artists and Art History a regular part of course.

HS Band (Band)

Grades 9, 10, 11, 12

Course No. MUH200 1.0 Credit Hour

Prerequisite: *None*

This course helps students develop techniques in tone and rhythms while playing in a large ensemble. Various musical styles are presented and music contests are available to students who excel in large and small ensembles. Several concerts are presented yearly and attendance at performances is required.

HS Choir (Choir)

Grades 9, 10, 11, 12

Course No. MUH100 1.0 Credit Hour

Prerequisite: *None*

This course is designed to develop individual vocal technique within a group setting. Choir performs to glorify God. The choir will perform throughout the year at concerts, banquets, rest homes, dinners, graduation, church services, contests, etc. Attendance at performances is required. A high expectation for individual and group performance is required at every rehearsal by the instructor. The choir performs a variety of concert-style music from all historical periods.

Foreign Language

Spanish I (Span I)

Grades 9, 10, 11

Course No. FLH100 1.0 Credit Hour

Prerequisite: *None*

Students will work on the four basic skills-speaking, listening, reading, and writing. They will learn to express themselves in simple sentences both orally and in writing. They will learn about various Spanish countries including insights into different customs.

Spanish II (Span II)

Grades 10, 11, 12

Course No. FLH300 1.0 Credit Hour

Prerequisite: *Spanish I*

Students will continue to work on the four basic skills, but on a more advanced level. Activities include writing and performing skits, learning vocabulary appropriate for mission trips, and developing a travel brochure in Spanish. Students will add to their knowledge of Spanish cultures.

Spanish III (Span III)

Grade 11,12

Course No. FLH500 1.0 Credit Hour (Weighted)

Prerequisite: *Spanish I and Spanish II*

Students will continue to develop their conversational, reading, and writing abilities. Writing assignments include producing a newsletter, writing and producing a play, and writing summaries of Spanish articles. Reading assignments include short stories and books. Each student will be doing an in-depth study/report of a Spanish-speaking country.

Spanish IV (Span IV)

Grade 12

Course No. FLH700 1.0 Credit Hour

(Weighted)

Prerequisite: *Spanish I, II, III*

This course continues to build on skills developed in Spanish 1-3. It includes a wide variety of literature and presents authentic language in context, provides cultural perspectives, and addresses all four basic language skills. It helps students connect their learning to the community in which they live and helps them see the relationship between language, community, and career.

History

20th Century History (20 His.)

Grades 11, 12

Course No. SSH700 0.5 Credit Hour

Prerequisite: *US History*

This course will examine US History from 1900 to the present. Students will study international and domestic events at the turn of the century, World War I, the Russian Revolution, the Great Depression, World War II, the Korean Conflict, domestic events of the 1950s-70s, the Cold War and foreign conflicts in Israel, China, Vietnam, India, the Middle East, and Central and South America. The course will also explore and discuss the most recent events of US history. Special attention will be given to the sovereign God's influence on history in the 20th century.

American Government (Am)

Grades 11, 12

Course No. SSH400 0.5 Credit Hour

Prerequisite: *None*

This course describes, analyzes and explains the American system of government. It will address the historical context in which the United States government was built, including its Judeo-Christian heritage. Students will examine various government systems and compare them to that of the United States. Students will learn about the structure of the United States government, its policies and practices, and the role it plays in the world and the lives of US citizens. Students are encouraged to participate in democracy by praying for those serving in government positions, informing representatives of their positions, and serving their community and country. A test over the US Constitution must be passed to fulfill MO diploma requirements. (A test over the Missouri Constitution is also required if it was not passed in 8th grade)

US History (US Hist)

Grades 11, 12

Course No SSH200 1.0 Credit Hour

Prerequisite: *None*

This course will examine the development of the United States of America from its beginnings to 1900 AD. Students will study Native American cultures, European exploration and colonization of America, the American Revolution, the early Constitutional Republic, Westward Expansion, the US Civil War, Reconstruction, and events of the late 1800s. Historical documents will be examined to explore the context of events. Special attention will be given God's role in the history of the America and the philosophies, principles, and values upon which the nation was founded. Students will be encouraged to take responsibility for their country and its role in current events, leading America to be a nation following God. First semester students will examine US History from its beginnings to the American Revolution. Second semester students will examine US History from the Constitution to the end of the 19th century.

World Geography (Geog)

Grades 9, 10

Course No. SSH500 1.0 Credit Hour

Prerequisite: *None*

In this course, students will study the earth and its resources as God created them, the use of those resources by man, and geographic, historical, political, economic, and cultural features of various regions and countries of the world. The course includes an overview of geography and its components, developing cartography skills, and descriptions of individual countries from Asia, Africa, Europe, the Americas, Antarctica, Oceania and the Pacific Islands. Emphasis will be given to discussion on God's activity in the world through mission efforts. Students will be encouraged to participate in global missions through prayer, support, or going.

World History (W Hist)

Grades 9, 10

Course No. SSH100 1.0 Credit Hour

Prerequisite: *None*

This course will study world history from ancient civilizations to the 20th century. Special attention will be given to God's providence throughout the course of history. Influential people and events upon history as well as philosophical and ideological influences will be discussed. First semester students will examine World History from ancient times to the Middle Ages in Europe. Second semester students will examine World history from the Renaissance and Reformation period in Europe to the beginning of the 20th century.

English

Language Arts 9 (LA 9)

Grade 9

Course No. LAH009 1.0 Credit Hour

Prerequisite: *None*

This course is Grammar and Fundamentals of Literature. It builds upon the grammatical foundation studied in elementary and junior high levels. There are special sections including vocabulary, spelling and proofreading skills. The literature selections include an introductory course addressing six important literary elements. The literature section covers poetry, short stories, one novel and one play. Writing exercises that heighten the literary skills of the students are utilized throughout the course. Students are required to complete two book reports during the year. The basics of writing research papers are covered in depth. Writing journals are kept during the year and a portfolio of student work is begun which will be worked on throughout the school year.

Language Arts 10 (LA 10)

Grade 10

Course No. LAH010 1.0 Credit Hour

Prerequisite: *None*

This course is Elements of Literature. The literature units focus on literary marks, models, and forms. During the course of the year students read two major novels and one play. Students are required to complete two-four book reports. Literature selections include poetry, short stories, biographies, and essays. Writing journals are kept during the year and a portfolio of student work is continued which will be worked on throughout the school year. More advanced grammatical skills are utilized.

Language Arts 11 (LA 11)

Grade 11

Course No. LAH011 1.0 Credit Hour

Prerequisite: *None*

This course is Grammar and American Literature. Grammatical skills are reviewed for college exams, and composition skills are enhanced through personal writings, research papers, essays and other writing exercises. Students read and evaluate writings from the various periods of American Literature. Students discover what influences shaped the various writers and study the impact their writings had on the world. Literature selections include historical essays, poetry, short stories and plays. Students complete a critical research paper over a facet of an American novel and they also complete two book reports during the year. Writing journals are kept during the year and a portfolio of student work is begun which will be worked on throughout the school year.

Language Arts 12 (LA 12)

Grade 12

Course No. LAH012 1.0 Credit Hour

Prerequisite: *None*

This course is Grammar and British Literature. Grammatical and proofreading skills are reviewed for college exams, and composition skills are furthered through personal writings, research papers, essays, letter writing and other writing exercises. Students read and evaluate writings from the various British authors views and determine what influence their writings had on the world and the church. Each student completes a critical research paper over a facet of British Literature and completes two book reports during the year. Writing journals are kept during the year and a portfolio of student work is begun which will be worked on throughout the school year.

AP English Literature (LA Lit)

Grade 11, 12

Course No. LAH100 1.0 Credit Hour

(Weighted)

Prerequisite: *(Teachers approval)*

This course is an advanced placement course engaging students in the careful reading and critical analysis of classic and contemporary American and European literature. The students will have close reading of a rigorous selection of texts, students will deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. Writing assignments will include a writing journal on the text and examination-length essays. Practice exams will include multiple-choice questions and essays to prepare for the AP English Literature exam in May (not required for course credit).

Math

Consumer Math (C Math)

Grades 11, 12

Course No. MAH100 1.0 Credit Hour

Prerequisite: *Algebra Essentials or equivalent*

Consumer Math helps prepare students to be competent consumers in tomorrow's workplace. Students gain proficiency in mathematical skills and consumer concepts. Students study topics including salaries and wages, buying insurance, maintaining a car, buying a home, completing tax returns and investing. Students participate in a year-long consumer skills project.

**Note: This course does not qualify as a college-preparatory course.*

Algebra I (Alg I)

Grades 8, 9

Course No. MAH300 1.0 Credit Hour

Prerequisite: *Pre-Algebra*

Algebra I (or Algebra Essentials) is required for graduation. Algebra teaches logical thinking, orderliness and precision. Basic arithmetic skills are essential. Topics include properties of real numbers, solving linear equations, graphing linear equations and functions, writing linear equations, solving and graphing linear inequalities, systems of linear equations and inequalities, exponents and exponential functions, quadratic equations and functions, polynomials and factoring, rational equations and functions, radicals and connections to geometry. Students will develop problem-solving skills and graphing concepts.

**Note: Students who successfully complete this course in 8th grade will fulfill the Alg I MO/SJCS math high school graduation requirement. The course will not be counted in the 26 total credits required for graduation or grade in GPA as per MO state guidelines since taken before entrance into high school.*

Algebra Essentials (AlgE)

Grade 9

Course No. MAH305 1.0 Credit Hour

Prerequisite: *Pre-Algebra*

This course covers the same topics as Algebra I- properties of real numbers, linear equations and inequalities, exponents and exponential functions, quadratic equations, polynomials and factoring, rational expressions, radicals, and connections to geometry. This course differs from Alg I with much more emphasis on review of skills such as decimals, fractions, factors and multiples, comparing and ordering numbers, estimation, perimeter, area, and volume. This class should be followed by GEOMETRY ESSENTIALS, which covers geometry topics as well as emphasizing the review of algebra skills in preparation for ALGEBRA II.

Geometry (Geom)

Grades 9, 10, 11, 12

Course No. MAH800 1.0 Credit Hour

Prerequisite: *Algebra I*

This course includes basics of geometry, perpendicular and parallel lines, congruent triangles, properties of triangles, quadrilaterals, transformations, similarity, trigonometry, circles, areas of polygons, and surface area and volume. Reasoning and proofs (2-column and paragraph) are introduced near the beginning of the course and used throughout.

Geometry Essentials (GeomE)

Grades 9, 10, 11, 12

Course No. MAH805 1.0 Credit Hour

Prerequisite: *Algebra Essentials*

This course includes basics of geometry, segments and angles, parallel and perpendicular lines, triangle relationships, congruent triangles, quadrilaterals, similarity, polygons and area, surface area and volume, right triangles and trigonometry, and circles. While full attention is given to postulates and theorems and their results, formulating proofs is not an emphasis. Much time will be devoted to reviewing algebra skills in preparation for Algebra II.

Algebra II (Alg II)

Grades 10, 11, 12

Course No. MAH400 1.0 Credit Hour

Prerequisite: *Geometry or Geometry Essentials*

Algebra II is a continuation of the skills developed in Algebra I. Students will continue to simplify and solve equations and inequalities of increasing difficulty. They will graph linear equations and functions and solve systems of linear equations and inequalities. They will work with matrix operations and determinants. They will evaluate and graph a broad range of functions- quadratic, polynomial, exponential, logarithmic, and rational. Powers, roots, and radicals will be covered as well as quadratic relations and conic sections. Sequences and series are introduced. Probability, statistics, and trigonometry are explored. A scientific calculator is required and graphing calculators will be used in classroom.

Advanced Math (Ad)

Grades 10, 11, 12

Course No. MAH500 1.0 Credit Hour (Weighted)

Prerequisite: Algebra II

Advanced Math is a two-semester survey course. Students will explore a variety of subjects including advanced algebra, geometry, trigonometry, probability and statistics. The geometric concepts include practical application problems as well as proving various theorems. Trigonometry includes the study of the unit circle, the arithmetic of trigonometric functions, solving equations and graphing sine and cosine curves. The laws of logarithms and various applications are studied. Probability and statistics topics include permutations and combinations as well as the standard normal curve and z-scores. Students learn to graph conic sections and polynomial and rational functions. A scientific calculator is required and a graphing calculator is provided for use in the classroom.

College Algebra (Col Alg)

Grades 11, 12

Course No. MAH600 0.5 or 1.0 Credit Hour (Weighted)

Prerequisite: *Algebra II and ACT Math score of 22*

Students must have at least a 3.0 overall GPA, an ACT math score of 22 or above, plus a recommendation from math instructor and/or guidance counselor in order to enroll for dual credit. Students must pay tuition to MWSU in order to receive college credit (3 credit hours). College Algebra is the standard math requirement for most college majors. College Algebra covers linear, quadratic and miscellaneous equations and inequalities. Students study relations and functions including polynomial, exponential and logarithmic functions. Students use graphing technology to solve systems of equations and matrices and to find zeros of polynomial functions. The use of graphing calculators is required throughout the course. Students need a TI-83 plus (or better).

Trigonometry (Trig)

Grades 11, 12

Course No. MAH601 0.5 Credit Hour

(Weighted)

Prerequisite: *College Algebra & ACT math score of 20*

Trigonometry is a one-semester dual college credit course offered in conjunction with MWSU for 2 college credit hours. Trig covers radian and degree measure, graphing the six trig functions, proving identities, applying the Law of Sines and Cosines, graphing logarithmic and exponential functions, DeMoivre's Theorem and Conic Sections. A graphing calculator TI-83 plus (or better) is required.

AP Calculus (Calc)

Grade 12

Course No. MAH700 1.0 Credit Hour (Weighted)

Prerequisite: *College Algebra/Trigonometry and ACT Math score of 20*

AP Calculus class includes the study of limits and continuity of real functions, the derivative and its applications, the integral, the integration and differentiation of exponential and logarithmic functions, and applications of integrals including area of a region and volume of a solid. This class can also be taken as a dual college credit through MWSU. Students must have at least a 3.0 overall GPA, an ACT math score of 20 or above, plus a recommendation from math instructor and/or guidance counselor in order to enroll for dual credit (5 credit hours).

*In May the students may take the College Board Calculus AB test (fee required) and earn college credit for Calculus I.

Physical Education

PE/Health (PE/H)

Grade 9

Course No. PEH009 1.0 Credit Hour

Prerequisite: *None*

Physical Education: This course emphasizes the development of the whole person ñ mind, body and spirit. The course develops and improves individual and team sport skills in order to build and maintain personal fitness and encourage an active lifestyle. Team sports and games are used as a vehicle to build strong muscles, character and interpersonal relationships.

Health: The SJCS Health course includes units on physical fitness, nutrition, disease, safety and first aid, chastity education and spiritual growth. This course teaches students about the wonders of the body God gave them and encourages students to establish good health practices.

Lifetime Fitness and Wellness
(Life Fit)

Grade 12

Course No. PEH 200 0.5 Credit Hour

Prerequisite: PE/Health

Based on the importance of preserving our bodies for service to God, this course is designed to teach students hands-on learning skills for physical fitness and the diverse recreational activities available that promote individual wellness and strength for a lifetime. Students will also learn of various resources that are readily accessible in the community. This course will provide students with the opportunity to start transitioning from youth-dependent to adult-independent fitness programming. Classes will be conducted both on-campus and in the local community. This class may require an activity fee.

Science

Biology (Bio)

Grades 9, 10, 11

Course No. SCH200 1.0 Credit Hour

Prerequisite: *None*

This course will discuss the basic principles of life, then it will explore chemistry, biochemistry, the cell, cellular functions, DNA, genetics, classification and evolution. This course will also introduce Zoology. This is a required course for graduation at SJCS.

Advanced Biology (Ad Bio)

Grades 10, 11, 12

Course No. SCH250 1.0 Credit Hour

Prerequisite: Biology

This course is a continuation into the study of the biological sciences. Topics include classification and diversity, plant life, animals, and human biology. More advanced labs will be performed including dissections.

Physical Science (Phys Science)

Grades 9, 10, 11, 12

Course No. SCH300 1.0 Credit Hour

Physical Science focuses on physics and general chemistry. Students will explore many different topics pertaining to physics and chemistry including: effects of forces, transformations of energy, structure of matter, behaviors of matter, and the properties pertaining to the changes in matter.

Anatomy (Anat)

Grades 10, 11, 12

Course No. SCH400 1.0 Credit Hour (Weighted)

This course will study the interactions between cells, organs and systems. It will accomplish an in-depth study of the 11 human body systems as well as biochemistry. Lab experiences will include a small mammal.

Chemistry I (Chem I)

Grades 10, 11, 12

Course No. SCH700 1.0 Credit Hour (Weighted)

Prerequisite: *Algebra I (or taken concurrently)*

This lab/lecture course is designed to provide a thorough background in the principles of chemistry for students who intend to take higher-level science courses in college.

Chemistry II/Chemistry 111 MWSU
(Chem II)

Grades 11, 12

Course No. SCH701 1.0 Credit Hour

(Weighted)

Prerequisite: *Chemistry I and ACT Math Score 22*

This class is offered for dual college credit with MWSU. Students receive instruction via video from college instructor, accomplish labs with high school teacher, and receive 5 credit hours from MWSC. This is described as the first college chemistry course in which basic concepts of the science are introduced. Topics include atomic theory and periodic system, chemical calculations, chemical reactions, states of matter, theories of chemical bonding, and atomic structure.

Physics (Phys)

Grades 11, 12

Course No. SCH800 1.0 Credit Hour (Weighted)

Prerequisite: *Algebra II (or taken concurrently)*

This lab/lecture course is designed to provide a thorough background in the principles of Physics for students who intend to take higher-level science courses in college.

Special Courses

Teacher/Office Aid (TA)

Grades 11, 12

No Credit

Prerequisite: *Administrative Approval*

With approval by classroom teacher and counselor, students may be placed in a classroom or office situation during a scheduled period each day. They will be required to report on time and perform expected duties as agreed upon.

College Online Class (Co)

Grades 11, 12 .5 Credit Hour

Prerequisite: *Cumulative GPA of 3.0 or higher and counselor approval*

Students are encouraged to take an online college course. The online college classes are through Southwest Baptist University in Bolivar, Missouri. Students will experience the challenge of an online college class and build up college credit as they prepare for college. A student can have access to the school computer lab or bring their personal laptop and use the school wireless network for online access. There is an added cost for enrolling in a college online course. Contact the counselor for more complete information.