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## **Briarwood Christian School**

# High School Course Selection Guide 2020-2021

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## **GRADUATION REQUIREMENTS 2020-2021**

## For Class of 2021 & Beyond

Course	College Prep Diploma	Honors Major Diploma		
*Bible (Old Testament, New Testament, Systematic Theology/Vocation & Calling, Apologetics/Financial Stewardship)	4.0	4.0		
English	4.0	4.0		
World Languages (same language)	1.0	2.0		
Mathematics (Algebra 1, Geometry, Algebra 2 with Trig, and higher)	4.0	4.0		
Science (Physics, Chemistry, Biology)	4.0	4.0		
Social Studies (World History 2, US History 1, US History 2, Government/ Economics)	4.0	4.0		
Career Preparedness A	0.5	0.5		
Health	0.5	0.5		
Fine Arts	1.0	1.0		
Physical Education	1.0	1.0		
**Electives/Additional Credits	1.0	1.0		
***Minimum required credits by diploma	25.0	26.0		
Minimum community service hours (grades 9-12)	60	60		

\*Career Preparedness B - Financial Stewardship (credit 0.5) will be included in the Bible 12 curriculum

\*\*Additional courses/electives are offered in Bible, Fine Arts, World Languages, English, Mathematics, Physical Education, and Science.

\*\*\*Students enrolled at BCS must meet all outlined course requirements by diploma category to be awarded that diploma.

## COURSE LEVELS

**College Preparatory** - College Preparatory courses are designed to ensure that students have the necessary foundation to perform successfully in the typical college or university setting.

**Honors** – Honors courses are more rigorous, contain greater breadth and depth of content, and move at a faster pace than College Preparatory courses.

**Dual Enrollment** - Dual enrollment (DE) provides a value added opportunity for BCS students to earn high school and college credit each semester. In partnership with Jefferson State Community College (JSCC), the content and teaching methodology of the DE designated courses will be at the college level but taught in Briarwood's classrooms. The DE courses Briarwood will offer for DE credits are: Honors PreCalculus DE (MTH 112/113) Honors U.S. History DE (HIS 201/202), Honors Biology DE (BIO 101/102), Honors Spanish 2 DE (SP 101/102), Honors English 12 DE (ENG 101/102). Requirements for Dual Enrollment course eligibility and additional costs may be found on the School Counseling Page of our website (www.bcsk12.org) under "FAQ - Dual Enrollment and AP". Credit at the college level will be awarded each semester by JSCC if the student earns a minimum grade of C or better. Briarwood will award additional quality points for students enrolled in dual enrollment courses (see Grading Scale in this document). JSCC makes available a list of approved DE courses that are guaranteed to transfer to any public college or university in the state of Alabama on their website in their catalog under university parallel programs. While Briarwood's School Counseling Department will make every effort to assist students and parents in obtaining accurate information regarding DE course transferability to specific institutions, it is ultimately the parents' and students' responsibility to verify this information with the college or university their child is interested in attending.

**AP** - Advanced Placement level courses are available in Biology, Calculus (AB & BC), Chemistry, English Language, English Literature, Physics 1, Physics with Calculus, Statistics, US History, and US Government and Politics. Upon enrolling in an AP course at Briarwood, students must sit for the AP exam in May. Students are to remain enrolled in an AP course for the full school year unless there are extenuating circumstances (D or lower). Understanding that athletic competitions at the State level may interfere with the exam dates in May, students will be required to sit for late testing. The cost of regularly scheduled and late testing exams will be borne by the student and charged to the student's BCS account. **If, for whatever reason, a student does not sit for a regularly scheduled or late testing AP Exam, their AP weighting will be forfeited for the year**.

## HONORS/DUAL ENROLLMENT/AP COURSE PLACEMENT

All students, even those students currently in advanced classes, must complete the Honors/DE/AP application for any courses they desire to take for the upcoming academic year. Applications can be picked up in the school counseling office or printed from the BCS school website. The application process is designed to provide a holistic approach in assessing student placement.

Applications are due to the school counseling office <u>no later than Friday, February 7th, 2020 by</u> <u>3:00pm.</u>

Students are required to stay in any Honors, Dual Enrollment, or AP course for the entire year unless the first semester average is a D or lower or there is a recommendation for change by the teacher <u>and</u> the Department Chair.

## **NOTIFICATION OF COURSE PLACEMENT**

Students and parents will receive a notification email by <u>Tuesday, February 18th, 2020</u>, prior to course registration stating which courses the student has been recommended for regarding Honors/DE/AP placement. All placements and subsequent scheduling of honors courses will be based on the student's continued acceptable level of performance for the remainder of this academic year.

## **HONORS MAJOR DIPLOMA**

An "Honors Major Diploma" is distinguished from the "College Preparatory Diploma" by the following criteria:

- Honors classes in grades 10-12 (Math, Science, English, History) where offered excluding World Language
- Four full year (1 credit) AP classes are required -- choose from the following:
  - English English Language & Composition OR English Literature & Composition
  - History US History 11
  - Science Biology, Physics 1, Physics C, OR Chemistry
  - Math Calculus OR Statistics
  - World Language Spanish, French, OR Chinese
- Two years of the same World Language
- Completing the outlined 26 credit graduation requirements for Honors Major Diploma

## Briarwood Christian School and Jefferson State Community College Dual Enrollment and AP–FAQs

## 1. What is Dual Enrollment?

Dual Enrollment is a program that allows qualified high school students to enroll in college level courses and receive both high school and college credit <u>each semester</u>.

## 2. What Dual Enrollment Courses will be offered?

<u>Honors U.S. History 2 DE (HIS 201 and 202)</u> open to 11<sup>th</sup> grade approved students <u>Honors Pre-calculus DE (MTH 112 and MTH 113</u>) open to both 11th and 12th grade students <u>Honors English 12 DE (ENG 101 and 102)</u> open to 12<sup>th</sup> grade approved students <u>Honors Spanish 2 DE (SP 101/102)</u> open to both 10th -11th grade students <u>Honors Biology DE (BIO 101/102)</u> open to both 11th and 12<sup>th</sup> grade approved students

## 3. What qualifications must a student have to enroll in a Dual Enrollment course?

**Honors U.S. History 2 DE:** Student must receive Honors approval notification and have a cumulative GPA of 3.0 or above.

**Honors English 12 DE:** Student must receive an Honors approval notification and have a minimum 18 ACT English subscore and a cumulative GPA of 3.0 or above.

Honors Spanish 2 DE: Student must receive Honors approval notification and have a cumulative GPA of 3.0 or above.

**Honors Biology DE:** Student must receive Honors approval notification and have a cumulative GPA of 3.0 or above.

Honors Pre-calculus DE: Student must receive an Honors approval notification, have a <u>minimum 24 ACT math subscore OR a minimum 20 ACT subscore and a C in Algebra 2</u> <u>with Trig.</u> Students without an ACT score may test for placement eligibility. Testing will be set up for administration on the BCS campus in May. Students may register for the DE course during spring registration without test data and placement can be amended if necessary once the Jeff State placement test or ACT test results are received.

## 4. What about Dual Enrollment (DE) vs. Advanced Placement (AP)?

**Dual Enrollment (DE)** provides a value added opportunity for Briarwood students to earn college credit each semester while in a competitive college preparatory environment. The content and teaching methodology of DE designated courses will be at the college level. Jefferson State Community College's grades are indicated by letter grade only (A, B, C, D, F) without pluses or minuses or numerical grades. Credit at the college level will be awarded by JSCC if the student earns a minimum grade of C or better.

Advanced Placement (AP) courses are designated courses whose content is at a college introductory level. Upon completion of the course, students take an AP Exam and earn college credit based on the result of their AP Exam score (credit is generally awarded to students scoring a 3 or higher on the AP Exam). Students enrolled in AP courses must meet the guidelines outlined in Briarwood's Honors Selection Criteria.

**DE Honors Pre-Calculus and AP Calculus:** Generally, Briarwood students enrolled in Honors Pre-Calculus will go on to take AP Calculus (provided they meet the AP requirements). At some colleges and universities, a student who achieves a score of 3 or higher on the AP Calculus Exam will automatically receive college credit for Precalculus and Calculus (generally 6 credit hours).

If a student takes the Honors Pre-Calculus DE course and goes on to take the AP Calculus course, the DE enrollment Mth 112 and 113 courses *may* still count as elective college course credit. It is strongly recommended that parents and students familiarize themselves with the AP Exam credit policies at the institution(s) to which the student will apply.

## 5. Is there a fee for Dual Enrollment courses?

**Yes**. For the 2020-2021 school year, a 3-hour DE course will be \$456 and a 4-hour DE course will be \$608 (Biology and Spanish only) per semester. This amount covers all JSCC tuition and fees for <u>one semester</u>. For the year-long course, each semester will be \$456/\$608 or a full-year course for \$912/\$1216. Prices subject to change according to JSCC rates and policies.

## 6. What about class size?

JSCC requires a minimum of 10 students per section to implement a dual enrollment course.

## 7. Will DE courses transfer?

JSCC makes available a list of approved Dual Enrollment courses that are guaranteed to transfer to any public school in the state of Alabama on their website in their catalog under university parallel programs (i.e. University of Alabama, Auburn University, University of Montevallo, etc.). It is recommended that students check with Briarwood's Counseling Department regarding transferability of courses to private colleges and universities, as well as those institutions which are out-of-state. While Briarwood's Counseling Office will make every effort to assist students and parents in obtaining accurate information regarding transferability to specific institutions, it is ultimately the parents' and students' responsibility to verify this information with the college or university.

## 8. What is the registration process?

Students who are enrolled in dual enrollment section(s) of the courses offered at Briarwood will receive emailed instructions in the spring of the current school year. The instructions will include specific steps for online registration, required documents and payment through Jeff State's website.

## **DROPPING AND ADDING COURSES**

Requests to drop/add a course may only be made during the scheduled time periods that are communicated to students and parents as they are scheduled. In addition, it is important to note the following:

- It is important for students to review their <u>full-year schedule at the beginning</u> of the academic year when there is more flexibility in accommodating changes that could affect the second semester.
- It is the strong desire that a student's <u>full year academic courses</u> not be changed mid-year to another period to accommodate schedule changes, particularly for electives.
- Students will remain in year-long courses for the entire academic year.

## BRIARWOOD CHRISTIAN SCHOOL FINE ARTS ACADEMY

**Briarwood Fine Arts Academy** will serve to refine students' talent and skill, cultivate an appreciation and understanding of the Arts, and acknowledge students' dedication to the Fine Arts throughout their high school career. Students who graduate with the following requirements will receive a Fine Arts Endorsement on their Diploma.

## **Fine Arts Endorsement Requirements:**

(1) Students must complete (4) Fine Arts Credits during their High school career.

(2) A minimum of two of the four credits must be in one discipline: Art, Band, Choir, Drama or Digital Media/Creative Writing.

(3) Students must maintain a B average in all Fine Arts Courses completed.

## **Fine Art Courses**

(Approved Fine Arts Endorsement/ Fine Arts graduation requirement courses)

Art	Band	Choir	Digital Media	Drama	Writing
Art 1 (Introduction to Visual Art)	Concert Band	Radica Show Choir	Intro to Photography	Drama 1	Creative Writing
Art 2 (Adv. Drawing and Painting )	Marching Band	Karis Show Choir	Advanced Photography	Drama 2	
Art 3 (Art Portfolio 1)	Instrumental Techniques	Worship Leadership	Performance Technology	Drama 3	
Art 4 (Art Portfolio 2)	Lion Guard		Graphic Design/Artisan	Drama 4	
			Video Production		
			Lions Head Media		
			Sports Media		
			Yearbook		

Fine Arts Courses meeting graduation requirements **ONLY**:

- Films and Worldviews
- Communications & Speech

## **ELECTIVES**

Elective courses are offered in Bible, World Languages, Mathematics, Science, Fine Arts, Physical Education, and Other Electives subject categories. Elective courses are indicated within the course descriptions next to the course credit value. Elective courses may not be substituted for core academic courses in any subject category.

## **GRADES**

## **Grading Policies**

- a) Courses are offered on either a semester or year-long basis.
- b) Semester averages are calculated based on 80% semester grade and 20% final exam.
- c) All course grades are included in the computation of a student's grade point average, except for those courses that receive a pass/fail or non-numeric grade (i.e., office aides). The cumulative GPA is computed at the end of each semester.

## **Report Cards**

Report cards will be posted at the end of each semester.

## **Incomplete Grades**

- a. Students who have not turned in all work by the end of the grading period will be given an Incomplete (INC), with three days to complete missing assignments.
- b. Students may not take a semester exam in any subject if all work has not been completed. Failure to take the exam on time, without prior approval by the Principal, will result in a "0".

## Exams

Final examinations will be given in most courses at the High School level at the end of each semester.

- a. Students must take exams when they are scheduled. Permission to take exams at a date later than scheduled will only be granted in emergency situations.
- b. If a student is ill and is unable to attend school, the parent must call the High School Office immediately.
- c. Seniors with a semester average of 90 or higher may be excused from their final 2nd semester exam.
- d. Any students in 9th -11th grade, who have THREE A grades (semester 1, semester 1 final exam, and semester 2) in any subject, may be exempt from their 2nd semester exam for that subject. Included in this exemption would be second semester courses with an A for the semester. (An A is defined as a 90 or higher.)
- e. The exam exemption policy requires that a student have no more than 5 absences for the semester or 10 absences for the year (excused or unexcused, not counting the allotted approved college days for Juniors and Seniors).

## **GRADING SCALE**

		College Prep	Honors*	Honors/Dual Enrollment	AP
A+	98-100	4.4	4.65	5.0	5.4
А	93-97	4.2	4.45	4.8	5.2
A-	90-92	4.0	4.25	4.6	5.0
B+	88-89	3.4	3.65	4.0	4.4
В	83-87	3.2	3.45	3.8	4.2
B-	80-82	3.0	3.25	3.6	4.0
C+	78-79	2.4	2.65	3.0	3.4
С	73-77	2.2	2.45	2.8	3.2
C-	70-72	2.0	2.25	2.6	3.0
D+	68-69	1.4	1.65	2.0	2.4
D	63-67	1.2	1.45	1.8	2.2
D-	60-62	1.0	1.25	1.6	2.0
F	59-Below	0.0	0.0	0.0	0.0

\*Honors Geometry, Honors Geometry/w Math Team, Honors English 9, and Honors Physics

## TRANSFER STUDENT CREDITS

## General:

Once a student has successfully completed the enrollment process, all courses transferred from an accredited high school will be accepted at BCS. These courses will be applied to the required courses for graduation.

## **Home School Transfer:**

All home schooled students interested in enrollment at BCS must complete the regular enrollment process. Transcripts will be evaluated and placement will be based on course grades, test scores, letters of recommendation, and credits received through homeschooling.

## Honors/AP Courses:

Successfully completed Honors and AP courses will be accepted and recorded on the transcript as completed. Honors and AP grades will be computed at the same rate as BCS students. Quality points used in determining grade point average will be given only to subjects receiving such quality points from BCS.

## EARNING COURSE CREDIT OUTSIDE OF BCS

Students may not take courses at other institutions if the course is offered at BCS either during the academic year or summer school. An exception to this policy applies if a student has failed a required course or has not achieved mastery in Math and World Language (indicated by a semester grade below 70). Only then may a student take the course at an approved institution during the summer for course credit.

## ACADEMIC SUPPORT SERVICES

Believing that all children are the image bearers of Christ and are created to be useful members of the Body of Christ, Briarwood Christian School is fully committed to serving students of families who desire a uniquely Christian education for their children. The established Academic Support Services Program enables the School to meet the diverse educational needs of each student while equipping the whole child for life from a Biblical perspective.

The following guidelines have been established to document a student's eligibility for the Academic Support Services Program, determine the appropriate placement in the program, and assess the need for specific accommodations in the student's academic plan:

- The diagnosis of a learning disability or the designation of other special needs does not necessarily establish eligibility for Academic Support Services or considerations at Briarwood Christian School.
- Documentation of prior services and consideration by other parties or agencies does not necessarily establish eligibility for Academic Support Services or considerations at Briarwood Christian School.

## **Documentation Guidelines**

The following guidelines support the School's intention to provide the best education possible for each student.

- To be eligible to receive Academic Support Services, a student must have appropriate and current documentation indicating a need for special consideration. Current and appropriate documentation is defined as a full psychological evaluation within three years from the start of Academic Support Services consideration from a licensed psychologist or psychometrist. These evaluations should initially be presented to a staff member in the Academic Support Services Center or the Director of Counseling Services in the School Counseling Center.
- Briarwood's Educational Consultant will review documentation to determine if the disability has an adverse impact on the student's learning and will make the appropriate recommendations regarding eligibility, placement, and the availability of accommodations at BCS, to the prospective student's academic program.
- Distinction of Accommodation. <u>Accommodation does not reduce the required material to be learned and assessed.</u> It simply accommodates different learning styles.

## **SERVICE HOURS GUIDELINES**

## **Objective of Service:**

The true goal of all Christian education is for the student to become like Jesus Christ. Jesus Christ stated in Mark 10:45, "For even the son of man came not to be served, but to serve, and to give his life as a ransom for many." Service to our Lord and to others is an important facet of the Bible curriculum at BCS. All high school students at BCS are required to fulfill the Bible service hour requirement each year they are enrolled. Students planning on completing their service hours during the summer <u>must</u> have pre-approval from their current or next year's Bible teacher. Service hours will be reported electronically using the X2VOL application in the student's Naviance account.

## Service Hours Requirement by Grade

Freshmen - 10 hours\* Sophomore - 10 hours\* Juniors - 20 hours\* Seniors - 20 hours\*

\*\*\* A five-point deduction is taken from the final grade if requirements are not met.

## **Course Selection Overview**

\* Indicates application or audition required

BIBLE	Credit	9	10	11	12
Bible 9	1	•			
Bible 10	1		•		
Bible 11	1			•	
Bible 12	1				•
Fearlessly & Wonderfully Made (girls)	0.5			•	•
FINE ARTS	Credit	9	10	11	12
Intro to Photography	0.5	•	•	•	•
Advanced Photography	0.5	•	•	•	•
Art 1 – Intro to Visual Arts	0.5 or 1	•	•	•	•
Art 2 – Advanced Drawing and Painting	1		•	•	•
Art 3 – Art Portfolio	1			•	•
Art 4 – Art Portfolio	1				•
Marching Band*	0.5	•	•	•	•
Concert Band*	1	•	•	•	•
Instrumental Techniques*	0.5	•	•	•	•
Lion Guard/Winter Guard	0.5/0.5	•	•	•	•
Creative Writing	0.5	•	•	•	•
Graphic Design/The Artisan	0.5	•	•	•	•
Communications & Speech	0.5	•	•	•	•
Drama 1	0.5 or 1	•	•	•	•
Drama 2	1		•	•	•
Drama 3	1			•	•
Drama 4	1				•
Films and Worldviews A	0.5	•	•	•	•
Films and Worldviews B	0.5	•	•	•	•

Karis Show Choir*	1	•	•	•	•
Radica Show Choir*	1	•	•	•	•
Performance Technology*	1	•	•	•	•
Lions Head Media*	1		•	•	•
Video Production*	1			•	•
Worship Leadership*	1			•	•
Yearbook*	1		•	•	•
Sports Media	0.5 or 1	•	•	•	•
HISTORY	Credit	9	10	11	12
World History 2	1	•			
U.S. History 1	1		•		
Honors U.S. History 1	1		•		
U.S. History 2	1			•	
Honors U.S. History 2 DE	1			•	
AP U.S. History	1			•	
Economics	0.5				•
Government	0.5				•
AP U.S. Government & Politics	0.5				•
ENGLISH	Credit	9	10	11	12
English 9	1	•			
Honors English 9	1	•			
English 10	1		•		
Honors English 10	1		•		
English 11	1			•	
Honors English 11	1			•	
AP English Language and Composition 11	1			•	
English 12	1				•
Honors English 12 Dual Enrollment	1				•
AP English Literature and Composition 12	1				•

Echoes of Eden	1			•	•
MATHEMATICS	Credit	9	10	11	12
Algebra 1	1	•			
Geometry	1	•	•		
Honors Geometry	1	•	•		
Honors Geometry (Math Team)	1	•			
Algebraic Connections	1			•	
Algebra 2 with Trig	1		•	•	•
Honors Algebra 2 w/Trig	1		•	•	
Honors Algebra 2 w/Trig(Math Team)	1		•		
PreCalculus	1			•	•
Honors PreCalculus	1			•	•
Honors PreCalculus Dual Enrollment	1			•	•
Honors PreCalculus (Math Team)	1			•	
Advanced Algebra w/Financial Application	1				•
Calculus	1				•
AP Statistics	1				•
AP Calculus AB	1				•
AP Calculus BC	1				•
PHYSICAL EDUCATION	Credit	9	10	11	12
Boys Strength and Conditioning	0.5	•	•	•	•
Girls Strength and Conditioning	0.5	•	•	•	•
Physical Education (per semester)	0.5	•	•	•	•
Team Sport (per Semester)	0.5	•	•	•	•
Sports Statistical Management	0.5 or 1	•	•	•	•
SCIENCE					
Earth and Space Science	1	•			
Conceptual Physics	1	•	•		

Honors Physics	1	•	•		
Chemistry	1		•	•	
Honors Chemistry	1		•	•	
AP Chemistry	1			•	•
Biology	1			•	•
Honors Biology	1			•	•
Honors Biology Dual Enrollment	1			•	•
AP Biology	1			•	•
AP Physics 1	1			•	•
AP Physics C	1			•	•
Anatomy and Physiology	1				•
Honors Anatomy and Physiology	1				•
Environmental Science	1				•
Engineering Computer Aided Design and Drafting (C.A.D.D.)	1	•	•	•	•
Engineering Computations with MATLAB	0.5			•	•
WORLD LANGUAGE	Credit	9	10	11	12
Chinese 1	1	•	•	•	•
Chinese 2	1		•	•	•
Honors Chinese 3	1			•	•
Honors Chinese 4 or AP Chinese Language and Culture	1				•
French 1	1	•	•	•	•
French 2	1		•	•	•
Honors French 3	1			•	•
Honors French 4 or AP French Language and Culture	1				•
	1	•	•	•	•
and Culture Spanish 1* (only language open to 8th		•	•	•	•
and Culture Spanish 1* (only language open to 8th grade)	1	•	•	•	•

Honors Spanish 4 or AP Spanish Language and Culture	1			•	•
OTHER COURSES	Credit	9	10	11	12
Career Preparedness A	0.5	•	•		
ACT Prep	0.5		•	•	•
Health in Christian Perspective	0.5	•	•		
Counseling Office, Library, or Office Aide	0.5	•	•	•	•

## COURSE DESCRIPTIONS BIBLE

Graduation requirements: 4.0 credits

**Bible 9**: (yearlong; Prerequisite: none; 1.0 credit): Bible 9 consists of three quarters, which complete our survey of the Old Testament started in Bible 8 (Genesis through King David's United Kingdom). Beginning with King Solomon's United kingdom, the salvation story follows the division of Israel into two kingdoms, the Assyrian conquest of Israel, the Babylonian captivity of Judah, and the restoration of the exiles to Jerusalem. Solomon's wisdom books, the reigns of kings, and the ministry of the prophets complete the redemptive story and set the stage for the advent of Christ. The fourth quarter develops a foundational biblical perspective (worldview) by examining influential arenas of the student's life, where the Gospel can impact. Ten service hours are required for the academic year

**Bible 10**: (yearlong; Prerequisite: none; 1.0 credit): Bible 10 is a survey of the New Testament scriptures. During the first semester, students will anticipate the coming of Christ in the intertestamental period and will focus primarily on Christ by examining the stories, themes, and theology of His Gospel ministry and on the Holy Spirit by viewing the beginning of the early church in Acts 1-8. During the second semester, students will follow the movement of the Gospel mission, the expansion of the church, and the features, messages, and theology of the New Testament Epistles. In both semesters, students will implement critical thinking, analysis and interpretation to their Bible practice. The goal for students is to develop a Gospel-centered, grace and life obedience. Ten service hours are required for the academic year.

**Bible 11**: (yearlong; Prerequisite: none; 1.0 credit): Bible 11 consists of two distinct objectives. The first three quarters are a comprehensive study of God following the classic theological disciplines (i.e., the doctrines of Scripture, God, man, Christ, the Holy Spirit, sin, redemption, and the church). From this theological framework, the student will be equipped doctrinally and be able to defend their faith, across many current concerns and questions. In the last quarter of the course, "Life Calling," students will consider their Christian life purpose and vocation, their design and identity, and their college and career choices. Overall the goal is to prepare our juniors in the sufficiency of their Savior (2 Cor. 12:9) by equipping them with His Word (2 Tim. 3:16-17); so that they will love their Lord (Matt. 22:37) and others (John 13:34-35; Luke 10:27), and become Gospel salt and light in the world (Matt. 5:13-16). Twenty service hours are required for the academic year.

**Bible 12:** (year-long; Prerequisite: none; 1.0 credit): Bible 12 consists of two semester courses – Apologetics and Kingdom Stewardship. In apologetics, students will learn to defend their faith (1 Peter 3:15) and understand belief in an age of skepticism and doubt. They will address difficult and nagging questions about God and life that perplex people today. The second semester builds a biblical framework for personal mission, Christian Financial Stewardship (money), and ministry. Students will consider their role as stewards and servants of God. They will look at lifestyle, giving, saving, and debt that comprise their overall financial picture and the governing principles in each area. They will be challenged to formulate perspectives about ministry, the ethics of money, mercy, poverty, and wealth. Twenty service hours are required for the academic year.

**Fear(lessly) and Wonderfully Made**: (semester; Bible elective; open to female students in grades 11 and 12; 0.5 credit): This course is designed to uplift and strengthen young women who will soon depart Briarwood for college or a career. Emphasis is placed on fully appreciating God's design for women and

understanding the unique challenges and responsibilities of being women today. Through Bible studies, journal writing, and discussion, young women will deepen their relationships with God and be reminded daily of God's workmanship, His love, and the knowledge that He never fails. The class will be discussion based and participation determines the grade achieved for the course.

## <u>ENGLISH</u>

**English 9:** (year-long; 1.0 credit): An introduction to literary genres. Students read and experiment with mythology, short stories, drama, poetry, and novels, focusing on elements of analysis such as character, theme, and setting. Students engage in expository and creative writing assignments, including the five-paragraph essay, and are introduced to the research paper.

**Honors English 9:** (year-long; approved Honors/DE/AP application; 1.0 credit): An introduction to literary genres with a heavy concentration in writing and independent reading. Students will read works from a variety of genres and respond using evidence-based analytical writing as well as creative writing. Students will read several independent novels across the year in addition to the in-class curriculum. Analytical writing and presentation skills - including a research project - will integrate technology and Biblical principles, and focus on preparing students for writing in a variety of settings.

**English 10:** (year-long; 1.0 credit): A survey course in Early American Literature from Beginnings – 1900, covering the major writers as well as philosophies and historical events that affected those writers. Practice in composition and formal writing are centered on the literature of the period. The goal of the class is to develop a solid knowledge of literature and communication skills via improved writing, academic vocabulary, presentations, and speeches. Literary writing and academic research skills are further developed through the research paper.

**Honors English 10:** (year-long; approved Honors/DE/AP application; 1.0 credit): a survey course in American Literature through the early 20th Century, covering the major writers as well as philosophies and trends that affected those writers in light of Biblical truth. Analytical skills and more in-depth writing skills are both necessary and further developed in this course. Academic writing and research skills are further developed through a research paper involving literary criticism.

**English 11:** (year-long; 1.0 credit): A survey course in 20th Century American Literature, covering the major writers as well as philosophies and trends that affected those writers from 1900 to the present, with an emphasis on Biblical truth. Practice in composition and formal writing is centered on the literature of the period.

**Honors English 11:** (year-long; Prerequisite: approved Honors/DE/AP application; 1.0 credit): A survey course in 20th and 21st Century American Literature, covering the major writers as well as philosophies and trends that affected them, with an emphasis on Biblical truth. Analytical skills and more in-depth writing skills are both necessary and further developed in this course. Academic writing and research skills are further developed through another research paper involving literary criticism.

**AP Language and Composition:** (year-long; Pre-requisite: approved Honors/DE/AP application; 1.0 credit): a college-level course in argumentation. Students analyze works by professional American writers mostly in the last century. As they do so, they will write three kinds of essays—the rhetorical analysis essay, the argumentative essay, and the synthesis essay.

**English 12:** (year-long; 1.0 credit): A survey course in British Literature, covering the major philosophical and literary periods in British history. Students are taught ways to criticize and emulate the literature they read. Students engage in both critical and creative writing, improving their writing usage, and style. Students write another research paper in this class, this time a poetry explication.

**Honors English 12 Dual-Enrollment:** (year-long; Prerequisites: approved Honors/DE/AP application as well as the Jefferson State DE criteria;; 1.0 credit): An introductory college-level composition course in which students will learn to write organized expository essays, which will aid in participation in the collegiate academic community. In the first semester, students will write 6 papers in a variety of genres based on model essays. Students will study the tools of argumentation and construct a research project and presentation that will serve as their final. During the second semester, students will learn the skills of literary analysis and composition. Students will read poetry, short stories, and plays and compose 6 essays, including a research paper. This is a fee based course earning 3 college credits per semester with a 70 or higher.

**AP English Literature and Composition:** (year-long; Prerequisite: approved Honors/DE/AP application; 1.0 credit): A college-level course, AP English Literature immerses students in classic pieces of literature from a variety of time periods and cultures and guides them in analyzing how those authors have approached humanity's most basic questions. The course will call special attention to the author's craft and style, requiring students to connect a piece's form to its function. Many of the students' assessments are in-class essays, which prepare the students for the writing required on the AP exam. The culmination of the course is an in-depth independent study (Senior Project) that gives students the opportunity to read AP-level novels of their choosing on a topic of interest and produce a paper and creative presentation on their project.

**Echoes of Eden:** (year-long; English elective; open to grades 11 and 12; 1.0 credit): This class will focus on training students to see and articulate how God's story of redemption intersects with all other stories. Using J.K. Rowling's highly popular *Harry Potter* series, the class will examine how works that are not directly "Christian" still derive their power and significance by echoing strong thematic continuity with the gospel. Students will read John Eldredge's *Epic* and Jerram Barr's *Echoes of Eden* in addition to books 3-7 of the *Harry Potter* series. The class will include writing assignments, creative projects, and group presentations.

## FINE ARTS

(The following courses meet the criteria for the Fine Arts Endorsement)

**Introduction to Photography:** (semester; 0.5 credit, Students are required to have access to a dSLR camera): Students will learn the basics of shooting, composing, and editing photographs.

Advanced Photography: (semester; Prerequisite: Intro to Photography; 0.5 credit, Students are required to have access to a dSLR camera): Students will have open ended projects through which they can explore their personal creative style in the art.

## Art 1 – Intro to Visual Arts: (year-long; 1.0 credit)

Art 1 is an introductory art production course designed to teach basic skills key to creating art. Fundamental techniques in drawing, painting, printmaking, mixed media will be emphasized.

Art 2 – Advanced Art - (year-long; Prerequisite Art 1; 1.0 credit) Art 2 is designed to provide students with more advanced art instruction. Students will complete advanced projects that will further develop their art skills.

## Art 3 and 4 – Art Portfolio- (year-long; Prerequisite Art 1 and Art 2; 1.0 credit)

This is a studio based, portfolio building course for art students. Students will work with the instructor to develop a strong original portfolio which demonstrates strengths in a variety of mediums.

**Concert Band:** (year-long; Prerequisite: Band Director recommendation; 1.0 credit): A large ensemble class that performs formal concert music. Instrumentation includes wind and percussion instruments. Activities involving performance techniques, general musicianship and creative/critical thinking are emphasized.

**Marching Band** (semester; Prerequisite: Current Membership in Concert Band; 0.5 credit): A performance based ensemble that is designed to give the student an enriching and diverse instrumental music education while providing a number of performance opportunities for the student in a variety of settings. Marching Band is a skilled effort in which each student will show technical and musical growth throughout the course.

**Instrumental Techniques** (semester; 0.5 credit; Band Director recommendation) Students focus on individual development of skills and techniques through scales, etudes, solo literature and preparation for college and scholarship auditions.

**Lion Guard:** (1st semester; Prerequisite: Tryouts; 0.5 credit): A fall semester auditioned group within the marching band in which students learn the technical skills involved in expressive dance, flag, rifle, and saber choreography. The group rehearses and performs with the marching band at all events. The Lion Guard performs during halftime at all football games. This course may be used for .5 PE or Fine Arts credit.

**Winter Guard:** (2nd semester; Prerequisite: Tryouts, 0.5 credit) A spring semester auditioned group within the marching band in which students learn the technical skills involved in expressive dance, flag, rifle, and saber choreography. Evening rehearsals, as well as weekend rehearsals, are a required part of this course. Competitions and travel are also a part of the course and required.

**Drama 1:** (semester or year-long; 0.5 or 1.0 credit): Students will learn basic theatre skills: acting, directing, set design, costuming, lighting and theatre management.

**Drama 2:** (year-long; Prerequisite: Drama 1; 1.0 credit): Drama 2 is a theatre practicum class. Students will gain advanced theater skills along with opportunities for competition.

**Drama 3 and 4**: (year-long; Prerequisite: Drama 1, Drama 2; 1.0 credit): This course is a more comprehensive exploration of all aspects of theater. The advanced drama student will be required to play a key role in the fall and spring productions, as well as, participate in various drama competitions.

**Karis Show Choir:** (year-long; Prerequisite: Audition; 1.0 credit): This girls' choir is a performance based vocal ensemble. Students are exposed to a wide range of music literature through rehearsal and performance. The choir performs two major concerts per year, as well as participating in competitions. Credit for this course may be used towards fulfilling the requirement (1.0 credit) for Fine Arts and/or P.E.

**Radica Show Choir:** (year-long; Prerequisite: Audition; 1.0 credit): This mixed choir is a performance based vocal ensemble. Students are exposed to a wide range of music literature through rehearsal and performance. The choir performs two major concerts per year, as well as participating in competitions. Credit for this course may be used towards fulfilling the requirement (1.0 credit) for Fine Arts and/or P.E.

Worship Leadership: (year-long; Prerequisite: Interview; grades 11 and 12; 1.0 credit):

Worship Leadership is a worship ministry and Fine Arts elective designed to enhance student led worship during Chapels throughout the school year. The class also studies theology, history and practice of worship through the ages. Students must interview with the teachers in May. Any student in grades 11-12 may interview.

**Creative Writing:** (1st semester; 0.5 credit): A 1st semester course which offers a blend of workshop and traditional classroom approaches to creative writing. Students engage in writing poems, short stories, personal narratives, and feature stories.

**Graphic Design**/*The Artisan*: (2nd semester; 0.5 credit): A 2nd semester course in which students learn principles of graphic design, the process of magazine production, and the skills to successfully use InDesign, Photoshop, and Illustrator. As a class, students will produce our school magazine, *The Artisan*.

**Lions Head Media:** (year-long; Prerequisite: Intro to Photography or Drama 1; Application required; 1.0 Credit)

Lions Head Media is a course where students will begin to learn the basics of video production. We will examine all aspects of creating a video, including audio, camera settings, video editing, and storyboarding. This class will produce weekly videos that inform the school and honor Christ. Enrollment in this class is based on a student's application to the teacher, focusing on the level of interest, ability, and commitment to meeting expected "outside of class" assignments.

Video Production (year-long; Prerequisite: Lions Head Media; 1.0 credit):

Video Production is a course where students will continue to learn the skills to create quality videos. Using the latest Mac software and high end equipment, student learning experiences will include basic video shots, audio, and green screen techniques. The assignments may include but are not limited to BCS sporting events, school events, etc.

**Communications & Speech:** (semester-long; 0.5 credit): This class will cover areas such as networking, how to interview successfully, communication and speech writing and presentation.

**Sports Media:** (semester or year-long; Prerequisite: Intro to Photography; 0.5 or 1.0 credit): Sports media is a course where students will learn the skills to make high quality graphics. Students will learn the skills needed to take photographs at sporting events and use those images to create graphics used in social media posts.

**Yearbook:** (year-long; Prerequisite: Application required; 1.0 credit): Students work as a team to design and build the school's yearbook, *Scroll*. Students utilize photography, writing, editing, and design skills. Open to 10<sup>th</sup>, 11<sup>th</sup>, and 12<sup>th</sup> grade students only. Students who register for this class must have completed an application and been approved by the teacher.

## \*\* The following courses meet the Fine Arts Graduation Requirement but do not count towards the Fine Arts Endorsement.

Films & Worldviews A (1st semester) & B (2nd semester): (semester; each semester is 0.5 credit) Watch, analyze, and discuss great films! Special emphasis is placed on recognizing the worldview messages contained in popular movies.

## **HISTORY**

**World History 2:** (year-long; 1.0 credit): World History 2 is a survey course covering the Middle Ages to the French Revolution, emphasizing history as God's story. Themes of history and a biblical worldview are taught throughout the course, stressing the importance of history as a continuing account of God at work, directing and guiding events, rather than merely an accumulation of random, isolated human incidents. Students are encouraged to learn to properly assess the value of historical events and people while applying a Christian worldview.

**U.S. History 1:** (year-long; 1.0 credit): U.S. History 1 is a survey course of American history from the pre-Columbian era to the Industrial Revolution, highlighting the religious, political, and economic foundations of American society. Comparisons are made on how man's philosophy and view of God influence the development of the country. There is an emphasis on history as it relates to current events.

**Honors U.S. History 1:** (year-long; Prerequisites: approved Honors/DE/AP application; 1.0 credit): Honors U.S. History 1 is a survey course of American history from the pre-Columbian era (1491) through Reconstruction (1877), highlighting the religious, political, and economic foundations of American society. Comparisons are made on how man's philosophy and view of God influence the development of the country. This class is designed to prepare students to enter the AP U.S. History or Honors U.S. History DE courses in the 11th grade. Essay writing, evaluation of primary sources, and test-taking skills are emphasized.

**U.S. History 2:** (year-long; 1.0 credit): U.S. History 2 is a survey course which acquaints students with the religious, social, economic and political roots of America. Building from a Biblical base of man's origin and nature, American culture is examined chronologically for those lessons that can be gleaned from historical study from Reconstruction (1877) to the present day.

**Honors U.S. History 2 Dual Enrollment:** (year-long; Prerequisites: approved Honors/DE/AP application as well as the Jefferson State DE criteria; 1.0 credit): This survey course acquaints students with the religious, social, economic and political roots of America. Building from a Biblical base of man's origin and nature, American culture is examined chronologically for those lessons that can be gleaned from historical study from the Industrial Revolution to the present day. Dual Enrollment students <u>must take a final exam each semester</u> as a course requirement by Jefferson State CC. This is a fee based course earning 3 college credits per semester with a 70 or higher.

**AP U.S. History:** (year-long; Prerequisites: approved Honors/DE/AP application; 1.0 credit): This survey course of U.S. History is a college level course designed to prepare students to pass a national examination allowing college credit for those qualifying. Additionally, the course is integrated with a Biblical world and life view.

**Economics:** (semester; 0.5 credit): The study of economics introduces students to key concepts in microeconomics, macroeconomics, international and consumer economics. Students use various techniques such as graphing, tables, indexes, analysis, and hands-on projects to acquaint themselves with important economic concepts. In depth discussion of free market concepts acquaint the students with the tools needed for the support of the American economic system. Biblical principles are applied to everyday economic activities. Students will be encouraged to become knowledgeable and involved consumers in today's marketplace as they learn to make rational decisions on economic issues.

**Government:** (semester; 0.5 credit): This course takes students through an in-depth study of the United States government and the Constitution. Students will become familiar with the operations of the three branches of government as well as the historical basis for the actions political leaders take. Special emphasis is given to the significant role of the citizen, the impact of scripture on the nation, and God's blessings on our country. Students will learn ways in which they can influence the political world as Christians. This government course serves as the conclusion of previous history classes to prepare students to address society's problems, to participate in the political process, and provide a positive impact in their sphere of influence.

**AP U.S. Government and Politics:** (semester; Prerequisites: approved Honors/DE/AP application; 0.5 credit): This course introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning, assess the causes and consequences of political events, and interpret data to develop evidence-based arguments. Special emphasis is given to the significant role of the citizen, the impact of scripture on the nation, and God's blessings on our country. Students will learn ways in which they can influence the political world as Christians. Students are to remain enrolled in an AP course for the full school year unless there are extenuating circumstances (D or lower). Taking the AP exam is a mandatory requirement for Briarwood's students or the AP designation is forfeited.

## **MATHEMATICS**

**Algebra 1:** (year-long; Prerequisite: Pre-Algebra; 1.0 credit): This course introduces basic algebraic concepts dealing with the real number system, its properties, and operations. This course integrates algebra applications with geometry and teaches students to give a graphical representation for algebraic equations.

**Geometry:** (year-long; Prerequisite: Algebra 1; 1.0 credit): Geometry course builds on Algebra 1 concepts and increases students' knowledge of shapes and their properties through geometry-based applications, many of which are observable in aspects of everyday life. This knowledge helps develop visual and spatial sense and strong reasoning skills. Because of its importance, this Euclidean geometry course is required of all students receiving a college-prep diploma.

**Honors Geometry:** (year-long; Prerequisites: Algebra 1, approved Honors/DE/AP application; 1.0 credit): Honors Geometry differs from grade-level Geometry in rigor, pace, level of questioning, and robustness of proofs.

**Honors Geometry with Math Team:** (year-long; Prerequisites: Algebra 1 in 8<sup>th</sup> Grade; approved Honors/DE/AP application; 1.0 credit): Honors Geometry differs from grade-level Geometry in rigor,

pace, level of questioning, and robustness of proofs. Math tournament participation is required based on tournament schedule provided by the instructor.

**Algebraic Connections**: (year-long; Prerequisites: Algebra 1, Geometry; 1.0 credit): This a course that provides students with a bridge to courses beyond the level of Algebra 1 and Geometry and to the mathematical empowerment needed to make responsible financial and economic decisions. It is designed for students who need additional mathematical experiences prior to enrollment in Algebra 2 with Trigonometry.

Algebra 2 with Trig: (year-long; Prerequisites: Algebra 1, Geometry; 1.0 credit): This course is designed to prepare the student for high school precalculus and college mathematics. The course content integrates prior knowledge with more advanced algebraic concepts. This course is required for a college-prep diploma.

**Honors Algebra 2 w/ Trig:** (year-long; Prerequisites: Algebra 1, Geometry, approved Honors/DE/AP application; 1.0 credit): Honors Algebra 2 differs from grade-level Algebra 2 in rigor, pace, level of questioning and robustness of content application.

**Honors Algebra 2 w/Trig with Math Team:** (year-long; Prerequisites: Algebra 1, Honors Geometry, approved Honors/DE/AP application; 1.0 credit):. Honors Algebra 2 differs from grade-level Algebra 2 in rigor, pace, level of questioning and robustness of content application. Math tournament participation is required based on tournament schedule provided by the instructor.

**PreCalculus:** (year-long; Prerequisites: Algebra 1, Geometry, Algebra 2 w/Trig; 1.0 credit): Designed to equip each student with the tools necessary for a successful completion of calculus and/or other areas of high school or college mathematics. The twelve basic functions are emphasized as a major theme and focus, reinforcing the idea that to understand a problem fully, students need to understand it algebraically as well as graphically and numerically.

**Honors PreCalculus:** (year-long; Prerequisites: Algebra 1, Geometry, Algebra 2 w/Trig, approved Honors/DE/AP application; 1.0 credit): Honors Precalculus differs from grade-level Precalculus in rigor, pace, level of questioning and robustness of content application.

**Honors PreCalculus Dual Enrollment**: (year-long; Algebra 1, Geometry, Algebra 2 w/Trig, approved Honors/DE/AP application as well as the Jefferson State criteria; 1.0 credit) First Semester: This course emphasizes the algebra of functions – including polynomial, rational, exponential, and logarithmic functions. The course also covers systems of equations and inequalities, quadratic inequalities, and the binomial theorem. Additional topics may include matrices, Cramer's rule, and mathematical induction. Second Semester: This course includes the study of trigonometric (circular functions) and inverse trigonometric functions, and includes extensive work with trigonometric identities and trigonometric equations. The course also covers vectors, complex numbers, DeMoivre's theorem, and polar coordinates. Additional topics may include conic sections, sequences, and using matrices to solve linear systems. \*This is a fee based course earning 3 college credits per semester with a 70 or higher.

**Honors PreCalculus with Math Team:** (year-long; Prerequisites: Honors Geometry; Honors Algebra 2 w/Trig, approved Honors/DE/AP application; 1.0 credit) Honors Precalculus differs from grade-level Precalculus in rigor, pace, level of questioning and robustness of content application. Math tournament participation is required based on tournament schedule provided by the instructor.

Advanced Algebra with Financial Applications: (year -long: Prerequisites: Algebra 1, Geometry, and Algebra 2 w/Trig. with a "C-" average; 1.0 credit) Advanced Algebra with Financial Applications is a mathematical modeling course that is algebra-based, applications-oriented, and technology-dependent. The course addresses college preparatory mathematics topics from advanced algebra, statistics, probability, precalculus and calculus under seven financial umbrellas: banking, investing, credit, employment and income taxes, automobile ownership, independent living, and retirement planning and household budgeting. It provides students a motivating, young-adult centered financial context for understanding and applying the mathematics they have learned in prior courses and are guaranteed to use in the future.

\*This is a senior-only course and can be taken concurrently with other senior math courses.

**Calculus:** (year-long; Prerequisites: PreCalculus with a "C-" average; 1.0 credit): Comprehensive review of PreCalculus topics concerning functions (including trigonometric functions), as well as the study of limits, the derivative and its applications and an introduction to integration. This class is the equivalent of a first semester course in college calculus.

**AP Calculus AB:** (year-long; Prerequisites: Honors PreCalculus; approved Honors/DE/AP application; 1.0 credit): College level course following the syllabus provided by the College Board Advanced Placement program.

**AP Calculus BC:** (year-long; Prerequisite: AP Calculus AB; approved Honors/AP/DE application; 1.0 credit) College level course following the syllabus provided by the Advanced Placement program. The approach to concepts is descriptive, algebraic, numerical and graphical.

**AP Statistics:** (year-long; Prerequisites: Honors PreCalculus with an 80 or higher; Regular PreCalculus with a 90 or higher; concurrent with Honors PreCalculus w/Math Team; approved Honors/DE/AP application; 1.0 credit): This course is like the introductory Statistics courses typically required by colleges and universities for majors such as social science, health science, and business. Science, engineering and mathematics majors usually take this course in preparation for upper-level calculus-based statistics courses. The topics covered are organizing data graphically and numerically; producing data with samples, experiments, and simulations; probability; and statistical inference.

## **PHYSICAL EDUCATION**

**Boys or Girls Physical Education:** (semester or year-long;  $9^{th} - 12^{th}$  grade; 0.5 credit or 1 credit): Physical Education classes seek to introduce students to a variety of individual and team sports, while also focusing on improving all areas of fitness.

**Boys or Girls Strength and Conditioning**: (semester or year-long;  $9^{th} - 12^{th}$  grade; 0.5 or 1.0 elective credit): The combination of weight work, stretching, plyometric training, running and core work will help the student to improve physical performance. Priority enrollment is given to athletes.

**Team Sports:** (semester; Prerequisite: Tryouts for all sports except Football, Cross Country, and Track; 0.5 credit per sport per season): All sports must be taken on the BCS campus and must be recognized as a sport by the Alabama High School Athletic Associations (AHSAA). Team sports may fulfill the Physical Education requirement.

**Sports Statistical Management** (PE Elective, Semester Long or Yearlong; 0.5 or 1.0) Sports Statistical Management is a course where students will be immersed in the technological and statistical sides of sports. Students will use HUDL as a tool to create statistics for Briarwood Athletics. Students will use technology to promote Briarwood Athletic throughout the community. Students will learn the basics of each sport so they can accurately stat games. Working with the student's schedule, this will include going to occasional athletic events.

## **SCIENCE**

In science courses at BCS, students will be challenged honestly to consider the relationship between God's revelation in Scripture and in nature. The goal is to gain confidence in God's truth, integrate truth into their scientific practice, discern differences in scientism, and be prepared to address future issues in STEM-related careers.

**Earth and Space Science:** (Science elective: year-long: 9th grade only; 1.0 credit) This course is designed to interpret and understand the world around you. In order to do so, students will investigate and study the interrelationships between the earth, air, space, life, and water. Topics to be covered are the earth's layers, plate tectonics, earth as a system, the ocean, weather & climate, weathering – erosion – deposition, stars, solar system, space exploration, and theories pertaining to the formation of the solar system. Students will participate in laboratory exercises, small group activities, web based investigations, class discussions, projects, and research.

**Conceptual Physics:** (year-long;1.0 credit): Conceptual Physics emphasizes comprehension before computation. It is a combination of lecture and laboratory with concepts illustrated by the instructor and student through laboratory investigation. Students in the course will study motion, force, momentum, energy, waves, light, and electricity.

**Honors Physics :** (year-long; Prerequisites: Algebra 1, Geometry or Honors Geometry concurrently; approved Honors/DE/AP application; 1.0 credit): Physics uses laboratory investigation and argument from evidence to construct the conceptual and mathematical models of introductory physics. Students in the course will study motion, force, momentum, energy, waves, and electricity. Emphasis is placed on learning the skills and process of scientific thinking in conjunction with the content and mathematics of physics.

**Chemistry:** (year-long; Prerequisites: Algebra I, Physics; 1.0 credit): This survey course includes atomic structure, states of matter, formulas, reactions, equations, chemical bonding, stoichiometry, gas laws, periodic trends, solutions, acids and bases, thermodynamics and an introduction to nuclear chemistry. Students acquire laboratory skills as they perform many investigations. The objective is to develop a scientifically literate student who has an excellent basis for making scientific or technological decisions that affect society.

**Honors Chemistry:** (year-long; Prerequisites: Algebra I, Physics; approved Honors/DE/AP application; 1.0 credit): This survey course includes atomic structure, states of matter, formulas, reactions, equations, chemical bonding, stoichiometry, gas laws, periodic trends, solutions, acids and bases, thermodynamics, nuclear chemistry as well as pH, titration, and advanced stoichiometry involving solutions and gases. The focus is on in-depth study, which requires outside reading, problem solving, critical thinking exercises and extensive laboratory experiences.

**Biology:** (year-long; Prerequisites: Physics, Chemistry; 1.0 credit) This course explores the introduction to biochemistry, cell structure and function, DNA, cell reproduction, genetics, zoology, and ecology. These laboratory experiences stress safe lab procedures, correct usage of lab equipment, experimentation, critical analysis of data, and student inquiry and design of lab experiments.

**Honors Biology:** (year-long; Prerequisite: Physics, Chemistry; approved Honors/DE/AP application; 1.0 credit): This course provides a foundational study in organic chemistry, biochemistry, energy in biological systems, cell structure and physiology, and genetics. Extensive laboratory work, which is an integral part of this course allows the student to experience and to explore the fascinating world of living organisms. These laboratory experiences stress safe lab procedures, correct usage of lab equipment, experimentation, critical analysis of data, and student inquiry and design of lab experiments.

**Anatomy and Physiology:** (Science elective; year-long; Prerequisites: open to 12<sup>th</sup> graders, Physics, Chemistry, Biology; 1.0 elective credit): Anatomy encompasses the study of the macroscopic, microscopic, and physiological functions of systems of the human body. This course is offered in the 12th grade and is designed as further preparation for a student planning to major in any of the health fields in college or who is interested in the human body structures and how they function.

**Honors Anatomy and Physiology:** (Science elective; year-long; Prerequisites: open to 12<sup>th</sup> graders, Physics, Chemistry, Biology; approved Honors/DE/AP application; 1.0 elective credit): This course is for students who are interested in a more detailed study of the structures and functions of the human body. Class lectures will include the study of cells, biochemistry, and molecular biology and provide an understanding of the cardiovascular, respiratory, lymphatic, immune, digestive, nervous, urinary, and reproductive systems in the human body. Laboratory dissection is used to complement the lectures, discussions, and demonstrations. This course is offered in the 12th grade and is designed as further preparation for a student planning to major in a pre-med or nursing program in college.

**Environmental Science**: (Science elective; year-long; Prerequisites: open to 12<sup>th</sup> graders, Physics, Chemistry, Biology; 1.0 elective credit): This course exposes students to various scientific principles and methodologies necessary to evaluate the complexity of the natural world and the relationships present. Topics covered are astronomy, earth science, renewable and non-renewable energy, ethics and policy, ecosystems, human population growth, water pollution, air pollution, conservation, natural hazards, and climate change.

**Honors Biology Dual Enrollment:** (year-long; Prerequisites: Regular Track Requirement - Physics, Chemistry, Biology; Honors Track Requirement - Honors Physics, Honors Chemistry; approved Honors/DE/AP application as well as the Jefferson State criteria): This course is designed for non-science majors. First Semester will expose the students to the scientific method, cellular structure, bioenergetics, cell reproduction, Mendelian and molecular genetics, human organ systems. The second semester will cover evolutionary principles and relationships, environmental and ecological topics, classification, and a survey of biodiversity. \*This is a fee based course earning 4 college credits per semester with a 70 or higher.

**Honors Physical Science Dual Enrollment:** (year-long; Prerequisites: Physics, Chemistry; approved Honors/DE/AP application as well as the Jefferson State criteria); First Semester: This course provides the non-technical student with an introduction to the basic principles of geology, oceanography, meteorology, and astronomy. Second Semester: Includes an introduction to the basic principles of chemistry and physics. \*This is a fee based course earning 4 college credits per semester with a 70 or higher.

**AP Biology:** (year-long; Prerequisites: open to 11th & 12th graders; Honors Physics, Honors Chemistry; approved Honors/DE/AP application; 1.0 credit): This elective is the equivalent of an introductory college course for students who are keenly interested in learning the foundational principles and understandings in cell biology, biochemistry, ecology, genetics, and medicine and who meet the class prerequisites. This class addresses the developments in modern biology, asks essential questions, and applies and connects those advances to the state of science and life in the twenty-first century. The student will gain an appreciation for the processes and practices of science through classroom discussions and laboratory experiences.

**AP Chemistry:** (year-long; Prerequisites: open to 11th & 12th graders; Honors Physics, Honors Chemistry; or specific recommendation from Chemistry instructor; approved Honors/DE/AP application; 1.0 credit): This elective is the equivalent of an introductory chemistry course usually taken during the first year of college and conforms to recommendations published by the College Board. Students attain a depth of understanding in chemistry fundamentals and develop competence in solving chemistry problems. Laboratory experiences are equivalent to those typically encountered in a college chemistry lab.

**AP Physics 1:** (year-long; Prerequisites: open to 11th & 12th graders; Physics, Chemistry, Algebra 2, concurrently enrolled in Pre-Cal; approved Honors/ DE/AP application; 1.0 credit): This course is a algebra-based physics course beneficial for non-science majors, pre-med majors and engineering majors who are concurrently enrolled in pre-calculus. Students will study motion, force, energy, momentum, and circuits.

**AP Physics C:** (year-long; Prerequisites: concurrently enrolled in calculus; approved Honors/DE/AP application; 1.0 credits): This course is a calculus-based physics course equivalent to introductory college physics taken by engineering and physics majors. Students will study motion, force, energy, momentum.

**Engineering with CADD Elective Science Course -** (Science elective; 9th - 12th) year long course - no prerequisites. The Computer Aided Design & Drafting for Engineers portion of the course will use the Solidworks program. Students will learn 2D and 3D design and drafting and simulate the motion of movable parts. Students will master the ability to test parts for strength and safety. The remainder of the course includes engineering design, instrumentation, analysis, technical writing and formal presentations. Engineering Projects: Project One (in house build) - using 3D printer/CnC, Project Two (community build), Project Three (mission project). Project Three will be developed and completed during the school year and will culminate with an **optional** international missions trip.

**Engineering Computations with MATLAB:** (Science elective; 2nd semester; grades 11<sup>th</sup> -12 only; 0.5 credit): This course is designed to teach 11<sup>th</sup> and 12<sup>th</sup> grade students basic programming logic and coding using MATLAB, a text-based programming environment. MATLAB is quickly becoming a staple in undergraduate engineering curricula for teaching programming and implementing computational solutions to engineering problems. Students learn how to apply fundamental programming concepts and logic in MATLAB to solve engineering problems that include data analysis, digital signal processing, and modeling of physical systems.

## WORLD LANGUAGE

**Chinese 1:** (year-long; 1.0 credit): This introductory course will introduce the student to the Chinese language. In this blended\* course which combines classroom and online instruction, the student will learn listening, speaking, reading and writing skills through activities that are based on pedagogically proven methods of foreign language instruction. The course is aligned with the national Foreign Language standards.

**Chinese 2:** (year-long; Prerequisite: Chinese 1 with a "C" average; 1.0 credit): This is an intermediate level course that will reinforce the ideas that were presented in Chinese 1. In this blended course combining classroom and online instruction, the student will learn listening, speaking, reading and writing skills through activities that are based on pedagogically proven methods of foreign language instruction. The course is aligned with the national Foreign Language standards.

**Honors Chinese 3:** (year-long; Prerequisite: Chinese I and Chinese 2 with a "C" average; 1.0 credit): This course will reinforce and expand on topics studied Chinese I and in Chinese II. Character recognition and reading comprehension are emphasized. Though listening and speaking will still be important, there will be more emphasis on reading and writing. The course is aligned with the national Foreign Language standards.

Honors Chinese 4: (year-long; Prerequisite: Chinese 3 with a "C" average; 1.0 credit)

This course will reinforce and expand on topics studied Chinese III. In this course, the student will continue working on listening, speaking, reading and writing skills through activities that are based on pedagogically proven methods of foreign language instruction. Reading and writing are emphasized. The course is aligned with the national Foreign Language standards.

**French 1:** (year-long; 1.0 credit): Introductory course in which the student receives a foundation in a working vocabulary of everyday situations with practice in listening comprehension, oral competency, reading comprehension and writing simple sentences.

**French 2:** (year-long; Prerequisite: French 1 with a "C" average; 1.0 credit): Builds on the foundation of the introductory course and broadens the student's competency in the area of listening comprehension, oral competency, reading comprehension, writing sentences, and cultural knowledge. MOre extensive grammar topics are taught.

**Honors French 3:** (year-long; Prerequisite: French 2 with a "C" average; 1.0 credit): Comprehensive review of grammar, building on the student's ability to express himself more clearly, competently and fluently in French, both orally and in written work.

Honors French 4: (year-long; Prerequisite: French 3 with a "C" average; 1.0 credit):

Comprehensive review and practice of grammar, building on the student's ability to express himself more clearly, competently and fluently in French, through all means of communication. French IV uses a holistic approach that includes reading adaptations of literature, relevant movies, listening to and reading current media reports, and grammar.

**AP French Language and Culture:** (year-long; Prerequisite: French 3 with a "C" average; approved Honors/DE/AP application, 1.0 credit) The AP French Language and Culture is designed to be comparable to a 4<sup>th</sup> semester (or equivalent) of college French, and follows the AP Course guidelines as

outlined by the College Board. This course emphasizes communication (understanding and being understood by others) by applying the interpersonal, interpretive, and presentational modes of communication in real-life situations. Students culminate their studies by taking the AP exam in May.

**Spanish 1:** (year-long; 1.0 credit): Introductory course in which the student acquires a basic knowledge of grammar and vocabulary for comprehension, conversation, reading, writing, and culture.

**Spanish 2:** (year-long; Prerequisite: Spanish 1 with a "C" average; 1.0 credit): Extension of introductory course that continues to develop the four methods of communication, with emphasis on the spoken language. More extensive grammar topics are taught.

**Honors Spanish 2 Dual Enrollment (SP 101/102):** (year-long; approved Honors/DE/AP application as well as the Jefferson State criteria; 1.0 credit): This is a college level course in scope and pacing. Students will be introduced to the basics of speaking, reading, writing and listening in Spanish. Students will develop an awareness of the various cultures in Spanish speaking countries. SP 101/102 college credit.

**Honors Spanish 3:** (year-long; Prerequisite: Spanish 2 with a "C" average; 1.0 credit): Comprehensive review of grammar, building on the student's ability to express himself clearly, competently and fluidly in Spanish, both orally and in written work.

**AP Spanish Language and Culture:** (year-long; Prerequisite: Spanish 3 with a "C" average; 1.0 credit): The AP Spanish Language and Culture course emphasizes communication (understanding and being understood by others) by applying the interpretional, interpretive, and presentational modes of communication in real-life situations. The course engages students in an exploration of culture in both contemporary and historical contexts. Students culminate their studies by taking the AP exam in May.

## **OTHER COURSES**

**Career Preparedness A:** (each semester; 0.5 credit: Graduation Requirement): Focuses on the skills and knowledge that will help prepare students for future success in college and career.

**ACT Prep:** (each semester, 0.5 credit): Covers all 4 subjects and includes 2 complete practice tests. Allows busy students to get ACT Prep done during school hours. Recommended for Juniors in the Fall and Sophomores in the Spring.

**Health in Christian Perspective:** (each semester, Prerequisites: recommended for 9<sup>th</sup> grade; 0.5 credit): This class seeks to encourage students to follow the example of Jesus Christ; just as Jesus "increased in wisdom and stature, and in favor with God and man" (Luke 2:52), so are we to grow mentally, physically, spiritually, and socially. Topics covered from a Biblical worldview will encompass comprehensive health issues and focus on the application and mastery of developing health-enhancing skills. They will develop skills for accessing health information, products, and services for current and future health needs.

**Counseling Office, Library, or Office Aide:** (each semester; <u>0.5 credit</u>): Students assist in the area of choice each semester. Student placements are scheduled by seniority.