

Important Facts

Oak Ridge High School operates on an 8 period day.

All students take 6 credit-bearing classes and a lunch.

- Freshman: The additional period is used for a Guided Study where a certified teacher will monitor their grades and receive feedback from each student's teachers for areas on which to focus. Guided Studies are required for freshman to help with the transition to high school.
- Sophomores, juniors and seniors: The additional period will be used either for an additional elective, guided study, or for intervention/tutoring.

The Drop / Add deadline for changing a scheduled class is June 17. This deadline exists because:

1. The master schedule is built around student requests.
2. Our school budget is based on the master schedule and is due to the school board at the end of June.
3. Finally, staffing and sectional assignments for teachers are finalized after our budget is approved.

During the first two weeks of school a student may request a class change for the following circumstances:

1. An error was made on a student's schedule
2. An unscheduled course is necessary for graduation, NCAA clearance or specific post-secondary school/training requirements.
3. A specific pre-requisite is not met for a scheduled class.

During the first four weeks of school, a staff member may request a class change for the following reasons:

1. A specific pre-requisite is not met for a scheduled class.
2. A student has not demonstrated the pre-requisite skills.

Schedule change requests for extenuating circumstances that are beyond a student's control will be reviewed throughout the school year on a case by case basis.

Registration for current 8th graders

- Registration for current 8th graders (rising 9th graders) will be done during group meetings with high school counselors at the middle schools this Spring.
- Individual meetings to complete the four year plan will be held their freshman year.

Registration for current 9th, 10th, 11th graders will occur during February.

Freshman orientation will be announced in spring 2016.

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ORHS COURSE CATALOG INTRODUCTION

The Course Catalog contains general scheduling information, graduation requirements, suggestions for course selections, and course descriptions.

Oak Ridge High School is mandated by the Tennessee Department of Education to promote and provide each student with a rigorous college and career preparatory program of study. Our general expectation is that every student acquire the knowledge and skills necessary for college and career readiness. As a part of achieving this goal, each department offers a wide variety of courses on many relevant topics.

SCHEDULE

Oak Ridge High School offers an 8 period school day. Each student will take at least 6 credit-bearing classes and a lunch. The additional period will be used for either a guided study, elective credit, or an intervention class for tutoring. This schedule allows for greater accessibility and flexibility for our students and staff.

REGISTRATION

Registration for rising 9th graders will occur at the middle schools. A high school counselor will facilitate the registration process with the middle school staff, parents, and students.

Students currently in the 9th, 10th and 11th grade will register in an ORHS computer lab with the assistance of a school counselor during the month of February. Parents and students are also welcome to make an appointment with their school counselor for an individual planning meeting. If a student has not registered by the end of the registration period, a schedule will be assigned to him/her by the school.

CLASS CHANGES

Requests for schedule changes are due by June 17. This deadline allows the school to finalize the master schedule and properly allocate staff. Please note that a parent who wishes to override a staff-recommended class placement must do so in writing by June 17.

Schedule changes may be requested by students during the two week of school for the following reasons:

- An error was made on a student's schedule
- An unscheduled course is necessary for graduation, NCAA clearance or specific post-secondary school/training requirements.
- A specific pre-requisite is not met for a scheduled class.

Schedule changes may be requested by staff member during the first four week of school for the following reasons:

- A specific pre-requisite is not met for a scheduled class
- Incorrect placement: not having the appropriate knowledge or skills to complete a class

The Schedule Change Form must be completed with all signatures and returned to the Counseling Center. All requests must be approved by the Vice-Principal of Curriculum and are subject to class availability, size, balance, and prerequisites.

Schedule change requests after the first two weeks will require:

- Extenuating circumstances beyond a student's control.

PROGRAM PLANNING

Devising a 4-year plan of courses is a vital step in developing educational and career goals. Oak Ridge High School staff, students, and parents form a partnership in creating each student's 4-year plan. Students, parents, teachers, and counselors all have several specific responsibilities in the registration process. The following is a helpful check list:

Student: Obtains planning materials from homeroom teacher; gives careful consideration to course choices (in terms of offerings available, his/her own abilities, grades, interests, graduation requirements, and future plans); consults parents and school staff members for advice on choices of courses.

Parent: Reviews planning materials and course descriptions; assists students in making course choices; attends orientation sessions presented by ORHS counseling staff; and consults with subject teachers, counselors, or administrators whenever further advice is desired

Subject Area Teacher: Advises students regarding the classes in that teacher's subject area (level of difficulty, content, scope, and sequence); recommends specific courses for individual students within the subject area.

Counselor: Presents orientation sessions for students and parents to assist them in making course decisions; is available to students, parents, and teachers for guidance in making future plans; reviews and assists with on-line registration.

ACCREDITATION

Oak Ridge High School is accredited by the Tennessee State Department of Education and the Southern Association of Colleges and Schools.

PROMOTION REQUIREMENTS

A student must finish high school requirements within four years and the summer following the senior year in order to be counted as an on-time graduate by the Tennessee Department of Education.

GRADUATION REQUIREMENTS

To meet state and local requirements for graduation, all students shall have attained an approved attendance, conduct, and subject matter record which covers a planned program of education. Students must also take a series of EOC (End of Course) Exams as required by the State Board of Education. During the fall of the ninth grade, all students (along with their parent(s) and a counselor) will develop a four-year plan of study. The proposed program will be reviewed each year. The purpose of the four-year plan is to connect the student's academic and career goals to appropriate classes and to meet all graduation requirements.

Listed below are the graduation credit requirements for the Ready Core Curriculum (22 Total)

- 4 English
- 4 Math (including Algebra 2 and an additional advanced math credit beyond Algebra 2)
- 3 Science (including Biology and Chemistry or Physics)
- 2 World Language (same language)
- 1 Fine Art
- 1 U.S. History
- 1 European History, World History or Geography
- 0.5 Economics
- 0.5 Government
- 0.5 Personal Finance
- 1.5 Lifetime Wellness (.5 Wellness A, .5 Wellness B, and .5 an additional wellness)
- 3 Focused Electives (focusing on a particular concentration made up of three electives beyond the CORE requirements in one of the following areas: Fine Arts, Math & Science, Humanities, AP, or a Career academy)

Waivers may be submitted for administration approval which release selected students from their 2-year World Language requirement. For additional information, contact the school counseling office. Please note that World Language is required for all university admittance.

PUPIL COURSE LOAD

- All students must take six credit-bearing classes a day plus lunch. Because of the additional class period students may take a 7th credit-bearing class, a study hall, or an intervention class. Some students may be assigned to tutoring during the additional class period based on their individual academic needs.
- Each student will accrue between 24 and 27 credits by the end of their senior year.
- The Tennessee Department of Education requires all seniors to enroll in a full load of credit-bearing classes.
- All students enrolling in five advanced courses must make an appointment with their counselor. Any student requesting 6 AP or Honors classes must have approval from Vice-Principal of Curriculum.
- No student will be allowed to take 7 AP or Honors classes at the same time.

ORHS COURSES

Workshop courses are designed to focus on the state standards and on specific academic skills.

Workshop classes tend to be smaller and may be two periods long.

General Education courses are designed to meet high school graduation requirements and community College or Technical School admission requirements.

College Preparatory courses (CP) are designed with the appropriate rigor and pace to meet university academic requirement. These courses carry a CP label.

Honors courses (Hon) satisfy the Tennessee research, writing, and reading guidelines for honors designation. These courses exceed the state curricular standards and receive 0.5 additional points on GPA weighting.

Dual Enrollment courses use local community college curricula and Tennessee state standards/competencies. Admission requirements and enrollment must be met in order to earn college credit. Dual Enrollment courses also receive an additional 1.0 points on GPA weighting. Currently, Tennessee Dual Enrollment grant will pay \$500 each for the first two classes.

Advanced Placement courses (AP) are taught at the university level. All courses use the College Board curriculum and have been approved through the College Board Course Audit. Students may earn university credit based on AP Exam scores and will receive an additional 1.0 points on GPA weighting.

Post-AP courses are taught at a 200 or 300 college level and require applicable AP course work. These courses cover sophisticated topics in mathematics, science or computer science. Each Post-AP course receives an additional 1.0 points on GPA weighting.

Honors, National Industry Certification, Dual Enrollment, Advanced Placement and Post AP Courses

Honors and Dual Credit Courses					
English	World Language	Math	Science	Art	Career Academies
Freshman English, Honors Sophomore English, Honors Combined Studies English, Honors	French 2, Honors French 3, Honors French 4, Honors German 3, Honors Spanish 2, Honors Spanish 3, Honors Spanish 4, Honors	Geometry, Honors Algebra 2 Trig, Honors Pre-calculus Analysis, Honors Pre-Thesis	Biology 1, Honors Physics, Honors Chemistry, Honors Anatomy & Physiology Honors	9 th Grade Art Honors 2-Dimensional Art, Honors	Accounting I & II, Honors Microsoft Office 1 Microsoft Office 2, Honors Computer Systems: A+ Machining 1 Machining 2
				Music	
				Band, Honors Orchestra, Honors	
National Industry Certification Courses					
Robotics:MATLAB Welding: AWS-ELWL Nursing: Certified Nurse Assistant (CNA) TECTA Orientation		Nursing: Pharmacy Technician Microsoft MOS: Word, PowerPoint, Excel, Access and Outlook Child Development Associate		Mechatronics: Seimans PLC Machining: NIMS Machining: MSSC Production Technician	
Dual Enrollment Courses					
<u>Math & Science</u> Calculus 1 Precalculus 1 College Algebra <u>Humanities</u> Elementary French 1&2 Intermediate French 1&2		Elementary Spanish 1&2 Intermediate Spanish 1&2 <u>Fine Arts</u> Ceramics <u>Professional & Industry</u> Diagnostic Medicine CNA Nursing		Broadcasting 3 Digital Arts & Design 3 Early Childhood 3 Mechatronics 1 Mechatronics 2 Business Media Communications Business Math & Finance	
College Board Advanced Placement (AP)					
Fine Art	English	World Language	Math	Science	Social Studies
AP Studio Art: 2D AP Studio Art: 3D AP Studio Art: Drawing AP Art History AP Theory and Harmony	AP English 12 – Literature & Composition AP English 11 – Literature & Composition	AP French Language AP German Language AP Spanish Language	AP Calculus AB AP Calculus BC AP Computer Science Principles AP Computer Science A AP Statistics	AP Biology AP Chemistry AP Physics 1 AP Physics 2 AP Physics C Mechanics AP Physics C Electricity and Magnetism AP Environmental Science	AP Psychology AP World History AP U.S. History AP Human Geography AP Modern European History AP Micro Economics AP Macro Economics AP Government & Politics
Post-Advanced Placement (AP)					
Math Differential Equations, Multivariable Calculus, Linear Algebra, and Science Organic Chemistry Research Thesis in Math, Science and Computer Science Experimental Scientific Research					

Area of Focus:
Each student must have 3 credits in a single area

Area of Focus		Classes Included
Advanced Placement		Any AP class including those required for graduation. Students may count an AP course toward both a graduation requirement and an area of focus requirement at the same time.
Math/Science		Any math and science course beyond graduation requirements including but not limited to: Computer Programming, Genetics/Microbiology, Geology/Astronomy, Pre Thesis Math, and Scientific Research.
Humanities		Any English or Social Studies course beyond graduation requirements including, but not limited to: Oak Log, Creative Writing, upper level World Language, Psychology, Sociology, AP Modern European History, AP Psychology, AP Micro Economics, Theater classes or any content reading credit
Fine Arts		Any musical or visual arts class beyond graduation requirements including but not limited to: Art Foundations, 9 th grade Art, 2D Art, 3D Art, Ceramics, Photography, AP Art, Digital Arts & Design, Band, Orchestra, AP Harmony and Theory, Theater classes, Chorus and Ensemble.
Career Academies	Business Academy	Any course listed under the Business Academy section including, but not limited to Microsoft 1, Microsoft 2, Accounting I, Banking and Finance, and Virtual Enterprises International™.
	Digital, Audio and Visual Communication Academy	Any course listed under the Arts and Communication Academy.
	Early Childhood Academy	Early Childhood Education 1,2, and 3, including Co-op.
	Welding and Manufacturing Academy	Any course listed under Manufacturing or Welding sections including but not limited to: Machining, Mechatronics, Welding or Robotics.
	Health Science Academy	Any course listed under the Health Science section including but not limited to: Medical Therapeutics, Rehab Therapies, Diagnostic Medicine, Clinical Internship, and Anatomy and Physiology.

OAK RIDGE HIGH SCHOOL GRADING SCALE

Grading Scale and Grade Point Averages								
Grade	Workshop, General and CP Classes		Honors, Dual Credit and Industry Certification Courses		Dual Enrollment Courses		Advanced Placement And Post-AP Classes	
	Grading Scale	Grade Point Average	Grading Scale	Grade Point Average	Grading Scale	Grade Point Average	Grading Scale	Grade Point Average
A	93-100	4.0	90-100	4.5	89-100	5.0	88-100	5.0
B	85-92	3.0	82-89	3.5	81-88	4.0	80-87	4.0
C	75-84	2.0	72-81	2.5	71-80	3.0	70-79	3.0
D	70-74	1.0	67-71	1.5	66-70	2.0	65-69	2.0
F	0-69	0.0	0-66	0.0	0-65	0.0	0-64	0.0

State Approved Courses, National Industry Certification Courses, Honors Classes, Dual Enrollment and Advanced Placement classes will follow these grading scales to comply with the Uniform Grading Policy adopted by the Tennessee State Board of Education.

CLASS RANK

ORHS will report class rank in deciles beginning in the 2016-2017 school year. This means that student's class rank will be categorized as: Top 10%, 20%, 30%, 40%, 50%, 60%, 70%, 80% or 90%. Class rank will be determined by the weighted grade point average assigned to final grades of each course according to its course classification (see previous page Grading Scale Chart). The methodology established in computing the General Assembly Merit Scholarship (GAMS) program and the Tennessee Hope Scholarship program is un-weighted and therefore will not match the class rank GPA. A student's freshman, sophomore and junior year grades are used to determine class rank.

TRANSFER CREDITS

It will be the responsibility of the Principal or the Vice-Principal of Curriculum to provide final grade and credit determination for students transferring from another school to ORHS. If the student's transferring course is designated as advanced, accelerated or honors, the course will be transferred as advanced (and will receive the appropriate weighted credit) *only* if the course was offered as an advanced course at Oak Ridge High School during the same time the course was taken at the previous school. However, if the course in question is not offered as advanced at ORHS, advanced grade point weighting will not be granted in the GPA calculation for class rank. Transferred course work is automatically recognized for credit providing the school was accredited by the regional accrediting associations such as the Southern Association of Colleges and Schools or by the individual state department of education.

Twelfth grade students who transfer to ORHS must attend ORHS for no less than one full semester and earn no less than 2.5 credits to receive an ORHS diploma. Students who do not meet this requirement may transfer the credits they earn at ORHS to the school where they earned the remaining credits for graduation.

Students entering ORHS who have been home schooled or have attended non-accredited high schools are required to take standard examinations to certify course credit. All home school records will be reviewed by the Vice-Principal of Curriculum prior to any examination for credit. United States History credit may not be awarded on the basis of examination in accordance with Tennessee State Law.

ACADEMIC ELIGIBILITY REQUIREMENTS FOR HIGH SCHOOL AND COLLEGE ATHLETES

High School (TSSAA)

To be eligible to participate in athletic contests during any semester students must meet the following requirements as certified by the Athletic Director:

1. Students shall have regular enrollment, attendance, and carry at least five full courses or the equivalent.
2. Students must earn five credits the preceding school year if less than 24 credits are required for graduation or six credits the preceding school year if 24 or more credits are required for graduation. All credits must be earned by the first day of the beginning of the school year. Academic eligibility for a student is based on the requirements of the school the student was attending at the conclusion of the previous school year.

College (NCAA)

Athletes should check the NCAA website for all updates. To be eligible to participate in college athletics, all NCAA Division I and II schools require entering freshmen to have:

1. A (minimum) 820 on the SAT or 68 (sum of the four scores) on the ACT will be required. The core GPA and SAT/ACT score will be based on a sliding index scale that ranges from a 2.500 and higher core GPA and an 820 SAT/68 ACT to a 2.000 core GPA and a 1010 SAT/86 ACT.
2. A minimum of 2.0 (on a 4.0 scale) grade-point-average (C average). This must be maintained in the following core curriculum (college preparatory) courses:

	<u>Division I</u>	<u>Division II</u>
English	4 credits	3 credits
Math	3 credits	2 credits
Science	2 credits	2 credits
Social Studies	2 credits	2 credits

Additional English, Math, or Science	1 credit	3 credits
Additional English, Math, Science, Social Science, World Language, or Computer Science	4 credits	4 credits
Total	16 credits	16 credits*

*Beginning August 1, 2013, students planning to attend a NCAA Division II institution will be required to complete 15 core courses

*For Division I eligibility, one math credit must be in Algebra and the other math credit in Geometry or a higher-level math course for which Geometry is a prerequisite.

The following is a list of NCAA-approved core curriculum courses offered at Oak Ridge High School:

English

Freshman English
 Sophomore English
 Combined Studies English Honors
 Sophomore English, Honors
 Junior English
 AP Junior English
 Senior English
 AP Senior English

Natural/Physical Science

(L) indicates laboratory
 CP Biology (L)
 Biology, Honors (L)
 AP Biology (L)
 General Chemistry (L)
 Chemistry, Honors (L)
 AP Chemistry (L)
 General Physics (L)
 AP Physics B and C (L)
 AP Physics 1
 AP Physics 2
 Environmental Science (L)
 AP Environmental Science (L)
 Anatomy & Physiology, Honors (L)
 Astronomy (L)
 Geology (L)
 Microbiology
 Genetics

Social Science

World Geography
 World History (R)
 Combined Studies World History
 AP Modern European History
 US History (R)
 US History (A)
 AP US History
 Business Economics
 Economics
 AP Micro Economics
 AP Macro Economics
 Business Law
 Psychology (R)
 AP Psychology
 Sociology
 US Government
 US Government/Civics
 AP Human Geography

Additional Courses

Spanish: Levels 1-4, AP
 Spanish Language
 French: Levels 1-4, AP
 French Language
 German: Levels 1-3, AP
 German Language
 AP Computer Science

Mathematics

Advanced Algebra 1
 Advanced Geometry
 Advanced Algebra 2/Trig
 Algebra 1
 Algebra 1 Workshop
 Algebra 1T
 Algebra A (.5 credit)
 Algebra B (.5 credit)
 Algebra 2
 Algebra 2/Trig, Honors
 Algebra 2/Trig
 Geometry
 Geometry, Honors
 Geometry T
 Geometry A (.5 credit)
 Geometry B (.5 credit)
 Pre-calculus Survey
 Pre-calculus, Honors
 AP Calculus AB and BC
 Calculus 2
 AP Statistics
 Algebra 3/with Trigonometry
 Algebra 3

NAIA

The student must meet two of three entry level requirements:

1. A minimum score of 18 on the Enhanced ACT or 860 on the SAT.
2. Achieve an overall high school grade point average of 2.000 on a non-weighted 4.000 scale.
3. Graduate in the top half of the high school graduating class.

OAK RIDGE HIGH SCHOOL COURSE DESCRIPTIONS

ART

The Art Department offers a comprehensive study of art for all levels of ability and skills. Students must begin with a full year of Foundations of Art or 9th Grade Art Honors as a prerequisite to continue with advanced studies in Art Photography, 2-Dimensional and 3-Dimensional Art, Theatrical Art and Design, or Ceramics. Students are encouraged to develop a portfolio in their junior and senior year by enrolling in AP Studio Art. AP Art History does not require Foundation of Art as a Pre-requisite.

The goals of the Art Department parallel and reinforce the goals of both the State Curriculum and the National Standards for Art. These goals are to foster and promote the following qualities: high level thinking and creative problem-solving, knowledge of art history and cultural heritage, visual literacy, awareness of self, and strengthened technical skills. It is important to realize that art is an avenue for learning as well as a body of knowledge.

Art Sequencing

Freshman, Sophomore, Junior or Senior	Sophomores, Junior or Seniors
Foundations of Art	→ 2 Dimensional Art Honors
	→ Theatrical Art and Design
	→ Art of Photography
	→ Ceramics/ AP 3D Art/ Dual Enrollment Ceramics
	→ AP Art Studio Juniors & Seniors
	→ AP Art History
9 th Grade Art Honors (9 th grade only)	→ 2 Dimensional Art Honors
	→ 3 Dimensional Art
	→ Art of Photography
	→ Ceramics/ AP 3D Art/ Dual Enrollment Ceramics
	→ AP Art Studio
	→ AP Art History Juniors & Seniors

Foundations of Art - 123501: Full Year; 1 credit; 9th, 10th, 11th, 12th

Required class for students who plan to take additional art courses.

Foundations of Art is an introductory and survey course. Foundations of Art provides a variety of experiences that build on concepts and techniques. It is designed to answer the question “What is Art?” Answers to this question are discovered through the exploration of two-dimensional and three-dimensional formats. Art history, design and composition, and aesthetic criticism are integrated into the curriculum. The purpose of this course is to strengthen art skills, broaden students’ knowledge and appreciation of art, and prepare them for additional art courses. Independent work in a studio setting is a frequent expectation.

9th Grade Art Honors - 133501: Full Year – 1 credit; 9th

Prerequisite: submission of a portfolio, interview with a high school art teacher, and recommendation from both their 8th grade art teacher and high school art teacher.

Students will explore and learn media of both two and three dimensional art. Students will present their work to the instructor and identify with artists that share their style, process, or inspiration. They will also learn the origins and history of art and research careers related to art in which their talents are recognized. Four hours of art related community service are necessary to fulfill the honors requirement. After the completion of the course, students will be encouraged and prepared to advance their skills into other advanced art courses offered through the art department.

Dual Enrollment Ceramics – 163503: Full Year (Semester for Dual) - 1 credit; 10th, 11th, 12th **AP 3D Art Ceramics-163532: Full Year – 1 Credit; 10th, 11th, 12th**

Prerequisite: Teacher recommendation required and a grade of B or better in Foundations of Art

Dual Credit Ceramics is a studio art course which allows students to receive an art credit with an additional option to receive college credit. Students must have a strong interest in working with clay materials. Students will learn basic hand-building, wheel throwing, firing, and alternative clay techniques.

Students will create and design sculptural, functional, and well-crafted works of art as they relate to ceramics. There is a significant amount of studio maintenance required in this class and a grade is calculated for this activity. Attendance is an important factor in this class and will be considered when students apply for the course. Tools and materials are not available for home use. Upon completion of the college semester students are required to submit a portfolio of their work for the college credit.

AP Ceramics is a class for the serious student who has a strong interest in working with clay. Students must have a minimum of one year Ceramics coursework in addition to the prerequisite of Foundations of Art and teacher recommendation. Students must be motivated and able to work independently with a strong focus. The course requires a serious grounding in visual elements and principles and a synthesis of form and content.

Two-Dimensional Art 153504 Honors: Full Year - 1 credit; 10th, 11th, 12th

Prerequisite: Teacher recommendation plus a grade of B or better in Foundations of Art

2-D Art is a studio course designed for students who have successfully completed a full year of Art, and wish to continue the study of Visual Arts. The student will concentrate on studio experiences in drawing, painting, printmaking, and mixed media. In addition, there will be a continued study of aesthetics, techniques, and art history/appreciation. Students will use a variety of tools and materials with creativity and higher level thinking stressed. Students may take additional courses of 2-D Art to specialize in advanced painting, drawing, or printmaking (depending upon availability of space). This offers the serious art student a more in-depth studio experience and an individualized program. Priority will be given to first time students. A strong emphasis will be placed on the development of technical and conceptual aspects of the students work. Four hours of art related community service are necessary to fulfill the honors requirement.

Art of Photography - 173504: Full Year B 1 credit; 10th, 11th, 12th

Prerequisite: Teacher recommendation plus a grade of B or better in Foundations of Art. (Students are not required to have a 35mm camera to take this class).

Art of Photography is designed to teach students photography as an art form as well as a technical operation. Students learn to use the 35mm camera along with Digital cameras in creative and technical ways. Students gain experience with a variety of photographic equipment. Included in this course are the study of lighting, composition, mixed media, computer enhancing and digital imaging possibilities. Students will develop and process black and white film and prints, as well as learn basic darkroom procedures. Once basic techniques are learned, students begin the process of creative manipulation of photographs in the darkroom as well as on the computer. After an initial year of photography, if a student wishes further study, he/she may work as an independent study student (with teacher approval) in the Studio Art class or take another year of Art for Photography (with available space). Advanced Photography students should have a 35mm film camera and or a digital camera.

AP Studio Art - 153532: Full Year - 1 credit; 11th, 12th

Prerequisite: Foundations of Art or 9th Grade Art, plus one second year art course. Teacher recommendation is required plus a grade of B or better in previous art courses. Portfolio review also required. See any art teacher to schedule a portfolio review.

This course is for serious 11th and 12th grade art students who are highly motivated to do advanced level work. AP Studio Art is not based on a written exam: instead students submit a portfolio of work for evaluation at the end of the school year. The course will focus on the development and completion of the portfolio for submission for AP review. There are three different portfolios which can be submitted for review: Drawing or 2-D Design. Each portfolio consists of a quality, concentration and breadth section. Each involves a depth of investigation, a serious grounding in visual principles and techniques, and a synthesis of form and content. The student is expected to maintain maturity and focus and make a significant commitment to work both in and out of the classroom.

AP Art History 153534: Full Year – 1 credit; 10th, 11th, 12th grade students

Prerequisite: Juniors and Seniors- none
Sophomores- currently enrolled in Honors English course.

AP Art History is an art course for students who prefer an academic approach to the arts. AP Art History will look at important works of art to enhance the student's understanding of major events in world history. Students in AP Art History will have opportunities to act out famous paintings, debate issues in the art world, research great artists, tour art museums, and experiment with some art materials. AP Art History is open to any student in 10th, 11th, or 12th grade who is able to work on a college level in preparation for taking the Advanced Placement Art History test. This class will fulfill the fine art requirement for graduation and does not require any previous art training.

Theatrical Art and Design 183501: Full Year – 1 credit; 10th, 11th, and 12th grade only

Prerequisite: Teacher recommendation plus a grade of B or better in Foundations of Art

Theatrical Art and Design is an advanced level course for students who are interested in technical aspects of design which are parallel to aspects learned in Foundations Art and Art History. This course will develop skills in illustration, design, and construction. This course will provide a variety of experiences including fashion and costume design, prop design, simple interior design, and character development. The purpose of this course is to strengthen art skills, broaden knowledge and appreciation for design, and to provide students with hands on construction in areas of design. Students must possess the maturity level to work independently in a studio setting.

CAREER ACADEMIES

Pathway	Level I	Level II	Level III DE	Level IV
Audio & Visual Communication	Audio & Visual Communication I: Journalism	Audio & Visual Communication 2: YouTube Podcasting	Dual Enrollment A&V Communication: Guerrilla Filmmaking	Dual Enrollment Speech Communication
Digital Arts & Design	Digital Arts & Design I: Two Dimensional	Digital Arts & Design 2: Three Dimensional	Dual Enrollment Digital Arts & Design: Animation	Applied Arts Practicum
Information Technology and Computer Science	Computer Programming A & B	AP Computer Programing 1	AP Computer Programming 2	Dual Credit Computer Systems: A+
Business: Entrepreneurial	Microsoft Office 1A- Dual Credit	Honors Microsoft Office 2- Dual Credit	Marketing & Management, Principles Accounting 1	Virtual Enterprise or Banking & Finance or Accounting 1/2 or Co-op
Business: Finance	Microsoft Office 1A- Dual Credit	Accounting 1	Accounting 2	Banking & Finance or Co-op
Business: Office Management	Microsoft Office 1A & 1B Dual Credit	Honors Microsoft Office 2- Dual Credit	Business Media Communications- Dual Enrollment	Business Math- Dual Enrollment or Personal Finance- Dual Enrollment
Childhood Development Services	Early Childhood Education Careers I	Early Childhood Education Careers II	Early Childhood Education Careers III	Early Childhood Education Careers IV
Manufacturing	Machining 1: Certification	Machining 2: Certification	Mechatronics 1: Dual Enrollment	Mechatronics 2: Dual Enrollment
Engineering	Mechatronics 1: Dual Enrollment	Mechatronics 2: Dual Enrollment	Robotics 1	Robotics 2: Certification
Health Science: Nursing Services		Health Science 1: Medical Services	Health Science 2: Rehabilitative Services	Dual Enrollment Nursing Education: CNA Certification or Anatomy & Physiology Honors
Health Science: Clinical Services		Health Science 1: Medical Services	Health Science 2: Rehabilitative Services	Health Science Clinical Internship and DE Medical Terminology or Anatomy & Physiology Honors
Welding	Welding 1	Welding 2	Dual Credit Welding 3	Dual Credit Welding 4

DIGITAL, AUDIO AND VISUAL COMMUNICATIONS

This program of studies places particular emphasis on the 4 Cs of college and career readiness: Communication, Critical Thinking, Creativity, and Collaboration. These skills are vital to success in today's information- and technology-based workforce and careers.

Audio and Visual Communication Courses

This pathway is designed for students interested in a range of entertainment and news media fields. Course content centers on broadcasting commercials, music, news, and interactive programming. Students gain insight into the many facets of A/V production, including but not limited to concept creation, scripting, sound design, visual design, engineering, editing, budgeting, and producing, as well as cameras, lights, sound, and set design. Upon completion of this pathway, students will be prepared to seek employment or advanced training as a copywriter, art director, designer, journalist, and many other careers in entertainment and media. Students will compile artifacts for inclusion in a portfolio, which they will carry with them throughout the full sequence of courses in this pathway. Students will be involved in preparation and production of programs for Oak Ridge Schools Channel 15. Production assignments may be after school hours. Standards in these courses are aligned with Tennessee State Standards for English Language Arts & Literacy in Technical Subjects; Mathematics; Physical World Concepts; Physics; and Visual Art.

A&V Communication I: Journalism – 605763: Full year – 1 credit; 9th, 10th, 11th, 12th

This is a foundational course in the Arts, A/V Technology & Communications cluster for students interested in A/V production occupations. Upon completion of this course, proficient students will be to explain and complete the phases of the production process including pre-production, production, and post-production. Students will establish basic skills in operating cameras and other production equipment. Standards in this course include career exploration, an overview of the history and evolution, and legal issues affecting A/V production. Students will learn digital editing, the latest in computer graphics, special effects, and satellite communication.

A&V Communication II: YouTube Podcasting– 605764: Full year – 1-3 credits; 10th, 11th, 12th

Prerequisite: A&V Communication I

This is the second course in the A/V Production program of study intended to prepare students for careers in audio/video production. Students will advance in technical skill in utilizing industry equipment related to lighting and audio, and emphasize research and technical writing involved in planning productions. Upon completion of this course, proficient students will be able to plan, capture, and edit research-based productions of increasing complexity, individually and through collaboration in teams. In addition to more robust career preparation, standards in this course include an investigation of concerns affecting a/v production businesses, such as ethical and legal issues, technology, funding, and the organization of professional roles in various industries.

Dual Enrollment A&V Communication: Guerrilla Filmmaking – 605765: Full year - 1-3 credits; 11th, 12th

Prerequisite: A&V Communication II

This is an applied-knowledge course intended to prepare students to pursue careers and postsecondary learning in audio/video production. Students in this course will apply knowledge and skills from previous courses in the program of study to create productions both independently and in teams. Students will use industry equipment and technology to complete all phases of the production process, including planning, coordinating, capturing, editing, and distributing productions. Standards in this course include policies and regulations, independent and collaborative productions, distribution of media, and the production of live events. Upon completion of this course, proficient students will be prepared for a career in audio/video production or to transition to a postsecondary program for further study.

Dual Enrollment Speech Communications—629393: Semester- .5 Credit; 12th grade

Prerequisite: ACT Score of 19

This course is designed to introduce the student to the skills of interpersonal communication. Emphasis is placed upon the fundamental principles and techniques of public speaking, and the oral and physical aspects of delivery. Emphasis is also placed upon discussion, listening skills, thoughtful examination of diverse ideas, respect for everyone's right to a point of view and the tenets of free speech. F, Sp, Su Roane State General Education course approved and designed for transfer.

DIGITAL ARTS AND DESIGN

This pathway is for students interested in pursuing careers as multimedia artists, animators, graphic designers, and communications specialists. Course content is designed to develop strong knowledge in communications technologies, animation and software applications, digital graphics, motion graphics, and more for a broad range of business and industry applications. Students will leverage digital tools to gather, evaluate, and use information, and apply design skills in the communication of materials as they would for an organization or company. Upon completion of this pathway, students will be prepared to pursue advanced study in graphic design or communications, or seek entry-level employment with such organizations. Students will compile artifacts for inclusion in a portfolio, which they will carry with them throughout the full sequence of courses in this program of study. Standards in this program of studies are aligned with Tennessee State Standards for English Language Arts & Literacy in Technical Subjects, Tennessee State Standards in Mathematics, Tennessee Visual Art standards, and Tennessee Art History standards.

Digital Arts & Design 1: Two Dimensional — 615759: Full year– 1 credit; 9th, 10th

This is a foundational course in the Arts, A/V Technology & Communications academy for students interested in art and design professions. The primary aim of this course is to build a strong understanding of the principles and elements of design and the design process. Upon completion of this course, proficient students will be able to utilize industry tools to conceptualize and create communications solutions which effectively reach targeted audiences. Students will acquire basic skills in illustration, typography, and photography. Standards in this course include career exploration, an overview of the history of design, basic business management, and legal issues

Digital Arts & Design 2: Three Dimensional – 605760: Full year – 1 credit; 10th, 11th, 12th

Prerequisite: Digital Arts & Design 1

This is a course that builds on the basic principles and the design process learned in the introductory Digital Arts & Design I course. Upon completion of this course, proficient students will be able to perform advanced software operations to create photographs and illustrations of increasing complexity. Students will employ design principles and use industry software to create layouts for a variety of applications. Standards in this course also include an overview of art and design industries, career exploration, and business management.

Dual Enrollment Digital Arts and Design 3: Animation – 605762: Full year – 1 credit; 11th, 12th

Prerequisite: Digital Arts and Design 2

This is the third course in the Digital Arts & Design program of study. Applying design skills developed in prior courses, students will expand their creative and critical thinking skills to create comprehensive multimedia projects and three-dimensional designs. Upon completion of this course, proficient students will be able to use industry-standard software to create multimedia projects, web pages, three-dimensional models, and animations. Students will utilize research techniques to plan and enhance project outcomes. Standards in this course also include professionalism and ethics, career exploration, and business and project management.

Materials and Fees

There is a requested \$25 per month student-covered Adobe Creative Cloud fee.

Communications Arts Practicum—619393: Full year – 1 credit; 12th

Prerequisite: A/V Communications 3 or Digital Arts and Design 3

The *Applied Arts Practicum* is a course intended to provide students with the opportunity to apply the skills and knowledge learned in previous Arts, A/V Technology & Communications courses within a professional, working environment. In addition to developing an understanding of the professional and ethical issues encountered by professionals in these careers, students learn to refine their skills in problem solving, research, communication, teamwork, and project management through the completion of a course-long project. The course is highly customizable to meet local system needs. Instruction may be delivered through school laboratory training or through work-based learning arrangements such as internships, service learning, and job shadowing. Upon completion of the practicum, proficient students will be prepared to pursue postsecondary study in arts, a/v technology, or communications programs; or seek additional training or employment with the aid of the portfolio, which documents the student's work completed throughout the program of study. Standards in this course are aligned with Tennessee State Standards for English Language Arts & Literacy in Technical Subjects.*

Information Technology and Computer Science

Computer Programming A - 313625: One semester - 0.5 credit; 9th, 10th, 11th, 12th

Prerequisites: Open to any student.

This course is an introduction to coding concepts such as conditions, loops, functions, and objects. The concepts will be learned by building computer programs and games. Emphasis will be given to problem solving through structured program development.

Computer Programming B – 313632: One semester - 0.5 credit; 9th, 10th, 11th, 12th

Prerequisites: Open to any student.

This course is a continuation of Computer Programming 1, but is flexible enough to accommodate students who did not take Computer Programming 1 or who have no programming experience.

AP Computer Programming 1: Principles – 323635: Full year- 1 Credit: 9th, 10th, 11th, 12th

Prerequisites: Open to any student who has successfully completed Algebra 1 with an “A” or “B”.

AP Computer Science Principles focuses on foundational computing skills to help students understand the relevance of those computing skills to their college and career plans. Multidisciplinary in nature, this course teaches students how to analyze problems, use creative thinking, and create computational artifacts including programs. Throughout the course, students will collaborate to investigate real-world issues using computing. The course focuses on seven major ideas in computing: Creativity, Abstraction, Data and Information, Algorithms, Programming, Internet, and Global Impact.

AP Computer Science 2: Java – 313635: Full year - 1 credit; 10th, 11th, 12th

Prerequisites: Open to any student who has at least one semester of programming experience or has completed Algebra 2.

Students will follow the Advanced Placement Computer Science curriculum outline. AP booklets with a detailed course description are available through the AP Computer Science teacher or the Counseling Office. The major emphasis of this course is on programming methodology, algorithms, and data structures using JAVA. Applications are used to develop student awareness of the need for particular algorithms and data structures, as well as to provide topics for programming assignments to which the students can apply their knowledge. Treatments of computer systems and social implications of computing are integrated into the course work and not isolated as separate units. This course may be used as a math graduation requirement for Senior year if a student has received credits in Algebra 1, Geometry and Algebra 2 by the end of their Junior year.

Dual Credit Computer Systems: A+ 606095: Full Year – 1 credit, 12th graders

Prerequisites: Through application based on availability.

Students will work directly with IT professionals

Computer Systems is an intermediate course designed to prepare students with work-related skills and aligned certification in the information technology industry. Content provides students the opportunity to acquire knowledge in both theory and practical applications pertaining to hardware, operating systems, safe mode, command prompt, security, networking, printers, peripheral devices, laptops, mobile devices, troubleshooting, and customer service management. Upon completion of the course, proficient students will have acquired skills and knowledge to install, configure, and maintain computer systems. Students who are proficient in this course will be eligible to pursue the IT industry-standard credential, CompTIA's A+ certification.

BUSINESS ACADEMY COURSE DESCRIPTIONS

Universal Courses: May apply to any academy or area of focus

Microsoft Office 1: Computer Applications A, Dual Credit - 603718: Semester - .5 credit: 9th, 10th, 11th
Microsoft Office 1: Computer Applications A, Dual Credit - 623718 : Full Year (1/2 period daily) – .5 credit: 9th, 10th

Freshmen and Sophomores may take Microsoft Office 1A instead of Guided Study or instead of Lunch Study Hall.

Microsoft Office 1: Computer Applications A is a foundational course intended to teach students the computing fundamentals and concepts involved in the use of common software applications. Upon completion of this course, students will gain basic proficiency in word processing, spreadsheets, and presentations. In addition, students will have engaged in key critical thinking skills and will have practiced ethical and appropriate behavior required for the responsible use of technology. Standards in this course are aligned with Tennessee State Standards for Literacy in Technical Subjects and Tennessee State Standards in Mathematics. *The course credit for this class is a universal credit for any area of focus.*

Microsoft Office 1: Computer Applications B, Dual Credit - 613718: Semester - .5 credit: 9th, 10th, 11th
Microsoft Office 1: Computer Applications B, Dual Credit - 633718: Full Year (1/2 period daily) – .5 credit: 9th, 10th

Prerequisite: Microsoft Office 1A

Freshmen and Sophomores may take Microsoft Office 1B instead of Guided Study or instead of Lunch Study Hall.

Microsoft Office 1: Computer Applications B, Dual Credit is a foundational course intended for students to learn the concepts associated with key application software, basic computing fundamentals, and ethics and appropriate behavior while using technology as a tool in the classroom and in life. The applications taught in this course are Microsoft Access and Publisher. Skills learned in Computer Apps A in Word, Excel, and PPT will be enhanced. The Computer Applications student will become proficient with Communication Networks, the Internet, and Technology Operations, Database Applications, Digital Citizenship, and Electronic Communication and Collaboration at a basic level.

Entrepreneurial, Finance and Office Management Courses

Honors Microsoft Office 2: Advanced Computer Applications, Dual Credit – 603730: Full year - 1 credit; 9th, 10th, 11th, 12th

Prerequisite: Microsoft Office 1A

This course prepares students to continue postsecondary training in business related programs, provides advanced training for students pursuing a career in administrative and information support, and supports obtaining an industry certification. Course content and projects are meant to simulate workplace scenarios and draw on skills related to communications, operations, management, and teamwork in order to accomplish information management goals. Upon completion of this course, proficient students will be fluent in a variety of information management software applications and will be prepared to sit for the Microsoft Office Specialist (MOS) certifications. Standards in this course are aligned with Tennessee State Standards for English Language Arts & Literacy in Technical Subjects and Tennessee State Standards in Mathematics.

The completion of this course prepares students to pursue the Microsoft Office Specialist (MOS) certification(s) by taking the exam(s) at an official testing center. (ORHS is an official testing center.) Certification exams are available in Word, Excel, Access, PowerPoint, and Outlook. The student will be responsible for paying for his/her certification exam(s) if grant monies are not available.

Students who complete this course as juniors or are enrolled in this course as seniors may apply to work in local businesses for work-experience credit (one or two additional credits) during their senior year. See Co-op.

Business Media Communications, Dual Enrollment — 605888: Full Year—1 credit; 10th, 11th, 12th

Prerequisite: Microsoft Office 1A

Dual Enrollment is part of Office Management Certification at Tennessee College of Applied Technology

This course is designed to develop students' effective oral and electronic business communications skills in multiple methods of communications, including social media, web design, publishing, and video conferencing. Students will learn to demonstrate successful styles and methods for professional business communications using the proper tools to deliver effective publications and presentations. Software used in this class includes Microsoft Office 2013 and Adobe Create Cloud applications.

Business Math, Dual Enrollment — 613717: Semester-- .5 credit, 11th, 12th

Prerequisite: Microsoft Office 1A

Dual Enrollment is part of Office Management Certification at Tennessee College of Applied Technology

Business Math is a program of study intended for students interested in financial decision-making and wealth management. Students will learn to use mathematics effectively as a tool in their personal and business lives. After students have completed this course, they will be able to apply mathematical concepts in various personal and business situations. Additionally, students will study concepts related to saving, investment, taxation, and retirement planning. They will create original portfolios of investment and retirement options to present to mock prospective clients. Students will collaboratively critique the financial consultations of others based on ethical and legal considerations. Upon completion of this course, proficient students will be prepared to pursue advanced study of business finance planning and management at a postsecondary institution.

Personal Finance, Dual Enrollment – 603767: One Semester (1 period daily) – .5 credit; 11th, 12th

Prerequisite: Microsoft Office 1A & Business Math

Dual Enrollment is part of Office Management Certification at Tennessee College of Applied Technology

Personal Finance is a course designed to inform students how individual choices directly influence occupational goals and future earnings potential. Real world topics covered will include income, money management, spending and credit, as well as saving and investing. Students will design personal and household budgets; simulate use of checking and savings accounts; demonstrate knowledge of finance, debt, and credit management; and evaluate and understand insurance and taxes.

Course may count in area of focus and personal finance graduation requirement.

Accounting I, CP – 603779: Full year - 1 credit; 10th*, 11th, 12th

***10th grader must have B avg. overall and instructor approval**

Accounting I, CP Honors: 613779: Full year - 1 credit; 10th*, 11th, 12th

***10th grader must have B avg. overall and instructor approval**

Prerequisite: None

This course provides an introduction to the field of accounting. The principles of debit and credit, the accounting cycle, the analyzing and recording of business transactions, and the preparation of business reports for service and merchandising businesses organized either as sole proprietorships, partnerships, or corporations are studied. Current terminology, business forms, and procedures are used. Students will work through an entire accounting cycle for a service business organized as a sole proprietorship and a merchandising business organized as a corporation. One or more business simulations will also be used in this course. Computerized accounting programs will be used to reinforce and expand accounting concepts as time allows. The reasoning, organizing, and decision-making skills taught makes Accounting I, CP a good course for any student planning a business career or any other professional career. A workbook is required.

Students who complete this course as juniors or are enrolled in this course as seniors may apply to work in local businesses for work-experience credit (one or two additional credits) during their senior year. See Co-op.

Accounting may count as a student's 4th Math credit for graduation.

Honors Option--extra fractional quality point value--Any student wishing to take Accounting I, CP for honors credit will be expected to complete additional assignments, independent projects, and take a comprehensive accounting examination. These additional assignments will be completed on an individualized instructional basis and will be graded. Students may elect this option once enrolled in the course.

Accounting II, CP - 603780: Full year - 1 credit; 11th, 12th

Accounting II, CP Honors - 613780: Full year - 1 credit; 11th, 12th

Prerequisite: Accounting I, CP with at least a C average and instructor approval

Accounting II, CP is an advanced study of concepts, principles and techniques that build on the competencies acquired in Accounting I, CP. Students will apply these concepts, principles, and techniques used to keep the electronic and manual financial records of a sole proprietorship, partnership and corporation. Departmental, management, cost and not-for-profit accounting systems are explored.

Computerized accounting programs will be used to reinforce and expand accounting concepts as time allows. The reasoning, organizing, and decision-making skills taught make Accounting II, CP an excellent course for any student planning a business career or any other professional career. A workbook is required.

Students who complete this course as juniors or are enrolled in this course as seniors may apply to work in local businesses for work-experience credit (one or two additional credits) during their senior year. See Co-op.

Accounting may count as a student's 4th Math credit for graduation.

*Honors Option--extra fractional quality point value--Any student wishing to take Accounting II, CP for honors credit will be expected to complete additional assignments, independent projects, and take a comprehensive accounting examination. These additional assignments will be completed on an individualized instructional basis and will be graded. Students may elect this option once enrolled in the course.

Banking and Finance – 603756: Full year – 1 credit; 11th, 12th

Prerequisites: (1) Microsoft Office 1A, (2) Business Academy instructor approval

Banking and Finance is a course designed to challenge students with real banking and financial situations through a partnership with a local financial institution. At ORHS this financial institution is Y12 Federal Credit Union. Y12 FCU provides students with the opportunity to experience the day-to-day operations of a financial institution by interning in the Wildcat Credit Union—the ORHS branch of Y12 FCU. Y12 FCU provides training and supervision for these students. Additional resources provided by Y12 FCU include mentors and seminars.

Upon completion of this course, proficient students will have a strong foundation for continued education in finance and business administration, specializing in occupations that support banking and financial institutions.

Students must complete an application for this program at registration time. Candidates will participate in a formal job interview as a part of the selection process.

Students who complete this course as juniors or are enrolled in this course as seniors may apply to work in local businesses for additional work-experience course credit (one or two additional credits) during their senior year. See Co-op.

Marketing & Management Principles - 605030: Full Year - 1 credit; 10th, 11th, 12th

Prerequisite: Microsoft Office 1A

Marketing and Management Principles focuses on the study of marketing concepts and their practical application. Students will examine risks and challenges marketers face to establish a competitive edge in the sale of products and services. Topics covered include foundational marketing functions such as promotion, distribution, and selling, as well as coverage of economics fundamentals, international marketing, and career

development. Upon completion of this course, proficient students will understand the economic principles, the marketing mix, and product development and selling strategies.

Students who complete this course as juniors or are enrolled in this course as seniors may apply to work in local businesses for additional work-experience course credit (one or two additional credits) during their senior year. See Co-op.

Successful completion of Marketing and Management meets the graduation requirement for Economics.

Virtual Enterprises, International™ - 603757: Full Year - 1 Credit; 12th

Prerequisites – Microsoft Office 1A and completion of an additional Business Academy Course (Exception: Current juniors in Accounting I CP may apply for VE as seniors.)

Virtual Enterprises, International™ (VE) is a simulated business environment. The VE students will be involved in actual on-the-job work experiences including accounting, personnel, administration, management, and marketing. The only difference between the VE company and an actual business is that no material goods are produced or legal tender exchanged; however, services will be provided. Working in a team, the student will develop and enhance oral and written communication skills through initiative, responsibility, and creativity.

The VE experience will weave together several academic disciplines and occupational subjects, thereby overcoming fragmentation of subjects. The course will link learning to application and real life experiences. The goal is to create a learning environment that, through a series of activities, integrates school and workplace to enhance learning. Laboratory facilities and experiences simulate those found in business and industry.

Students must complete an application for this program at registration time during their junior year. Candidates will participate in a formal job interview as a part of the selection process.

The VE course includes the creation/operation of a virtual business. This practice company will design, produce and market virtual products to other practice companies via the Internet. Students in the Business Academy will come together to utilize and combine their skills and expertise in the business environment. Students will use a variety of software. All students are strongly encouraged to participate in Future Business Leaders of America (FBLA), a youth leadership organization.

Students enrolled in this course as seniors may apply to work in local businesses for work-experience credit (one or two additional credits). See Co-op.

Cooperative Education (Co-op) – 603798: Full Year (1 or 2 periods daily) – 1 or 2 credits; 12th

Prerequisite: Microsoft Office 1A or Accounting I, CP and at least one additional Business Academy Course

Student must have completed an additional Business Academy course during the junior year or be enrolled in the course as a senior.

Co-op (Work-Based Learning: Career Practicum)--is a capstone course intended to provide students with opportunities to apply the skills and knowledge learned in previous CTE and general education courses within a professional work environment. The course allows students to earn high school credit for select models of work-based learning, which allow students to interact with the industry professionals in order to extend and deepen classroom work and support the development of postsecondary and career readiness knowledge and skills. Through Co-op, students participate in individual work-based learning experiences in professional settings when they meet the hours required for full-time course equivalent. Upon completion of the Co-op experience, students will be prepared for postsecondary and career opportunities aligned with their interests and demonstrate professional-quality employability skills relevant to their chosen career paths.

Students will participate in class instruction during 8th period every day for the first three weeks of school and will continue on Wednesdays for the remainder of the year. Both the classroom performance and the WBL on-the-job component are to be evaluated in determining a student's composite grade. Students must maintain 90% attendance both in school and at work.

Students must complete an online application for this program at registration time during their junior year. Candidates must be approved by Student Services before being allowed to interview. Business employers will interview and hire the student(s) of their choice.

EARLY CHILDHOOD EDUCATION ACADEMY

This program of study prepares learners for careers in planning, managing and providing education and training services and related learning support services. Millions of people each year prepare for careers in education and training in a variety of settings that offer academic instruction, vocational and technical instruction, and other education and training services. A growing emphasis on improving education and making it available to more Americans will increase the overall demand for workers in the Education and Training Cluster. Employers are expected to devote greater resources to job-specific training programs in response to the increasing complexity of many jobs, the aging of the work force, and technological advances that can leave employees with obsolete skills. This will result in particularly strong demand for training and development specialists across all industries.

Course content covers the components of curriculum planning, student learning, screening and assessing, and many other skills related to teaching younger populations. Upon completion of this program of study, students will have had the opportunity to work alongside educators in an internship experience, compile artifacts for a professional portfolio, and graduate prepared for further training at the postsecondary level. Standards in these courses are aligned with Tennessee Common Core State Standards English Language Arts & Literacy in Technical Subjects and Tennessee Psychology, and Sociology standards and National Standards for Family and Consumer Sciences Education.

Available Certifications: TECTA Orientation; Child Development Associate (CDA)

Dual Enrollment: Roane State Community College

Work-Based Learning: Student Teacher Internships

Aligned Student Organization: FCCLA

Early Childhood Education Careers I – 605650: Full year – 1 credit; 9th, 10th, 11th

Prerequisite: Completion of application, interview by instructor, and instructor recommendation

Requirements: Complete an Early Childhood Education Application (available in the Counseling Office and Early Childhood Education Classroom CS-250) and submit two letters of recommendation. Interviews will be conducted with each student. Applicants must have good attendance, discipline, and academic records. Students need to be focusing on a future career with young children and eager to work one-on-one with preschoolers.

Careers in early childhood education include but are not limited to childcare providers, nannies, and preschool teachers. This course studies the foundation of childhood development services, careers, provider responsibilities and aptitudes, and fundamentals of child development. Students will create a course portfolio.

Early Childhood Education Careers II – 605660: Full year – 1 credit 10th, 11th, 12th

Prerequisite: Early Childhood Education Careers I and instructor recommendation

This is a course for students interested in learning more about becoming an early childhood teacher, nanny, or childcare provider. This course covers the components of curriculum planning, learning, screening and assessing, special populations, and educational technology. Students in this course will observe educators in action, practice specific skills, and add personal work products to a course portfolio.

Early Childhood Education Careers III

Dual Enrollment Early Childhood– 605661: Full year – 1 credit; 11th, 12th

Prerequisite: Early Childhood Education Careers II and instructor signature; dual enrollment application and instructor recommendation

This is an applied knowledge course for students interested in learning more about becoming an early childhood teacher, nanny, or childcare provider. This course encompasses the components of the learning environment, planning age appropriate activities, using activities for learning, and developing communication

skills. Students in this course will participate in a work-based learning component of instruction and add work products to a course portfolio.

Early Childhood Education Careers

Work-Based Learning/Student Teacher Internships – 605698: Full year – 1-2 credits; 11th or 12th

Advanced course; college dual enrollment for Roane State Community College course ECED 2015/2030. See instructor for dual enrollment grant application. Must have required ACT scores.

Prerequisite: Early Childhood Education Careers II/III and instructor recommendation

This is an applied knowledge course for students interested in learning more about becoming an early childhood teacher, nanny, or childcare provider. The course standards cover understanding the components professionalism, policies, regulation, and teaching to learn principles. Students in this course will participate in a work-based learning component of instruction and add work products to a course portfolio. Work-Based Learning (WBL) activities are part of a structured system, open to students that have completed ECEC II. Only juniors or seniors (16 years or older) may participate. WBL activities allow students to apply classroom theories and explore career options at the work site, as well as connect classroom learning to work. Students will be placed in work sites that focus on a career interest. Examples include: Oak Ridge Schools – preschool, elementary, middle schools.

WELDING & MANUFACTURING ACADEMY

This program of studies is offered to expose students to a wide range of engineering, modern manufacturing, and welding career possibilities. Learners who pursue one of these career fields can be involved in design, automation and controls, software design/programming, electronics, CAD, manufacturing, and welding industry certification. A welding & manufacturing focus can also provide students with exposure to industrial robotics and modern materials and manufacturing methods. Standards in these courses are aligned with Tennessee State Standards for English Language Arts & Literacy in Technical Subjects and Tennessee State Standards in Mathematics.*

Available Certifications: American Welding Society Certification, Seimans PLC, NIMS & CPT

Dual Enrollment: Pellissippi State Community College, Tennessee Technology Center

Aligned Student Organizations: FIRST Robotics

WELDING

Welding 1– 605786: Full year – 1 credits; 9th, 10th, 11th, 12th

Welding 2 students will learn basics skills and knowledge related to cutting and welding applications. Course content includes safe practices, career research, leadership development, and basic arc welding and thermal cutting skills. Combined with the second and third year courses, Basic Principles of Welding and Welding Applications and Certification, the student should be prepared for Entry Level Welder Certification, as defined by American Welding Society QC10.

A written safety test must be passed with 100% before student is allowed to work in the Lab. Membership in SkillsUSA is encouraged.

Students will take certification tests for various welding processes and positions. Students that complete the three course sequence should be prepared for Entry Level Welding Certification, as defined by American Welding Society, QC10.

Welding 2 – 615786: Full year – 1 credit; 10th, 11th, 12th

Prerequisite: Welding 1 and Instructor recommendation.

Welding 2 is a course designed to follow Introduction to Welding, in which students will learn more advanced skills and knowledge related to cutting and welding applications. Development of welding and cutting skills will be continued in the context of a series of projects. Combined with the third year course, Advanced Welding applications and Certification, the student should be prepared for Entry Level Welding Certification, as defined by American Welding Society QC10.

Students will take certification tests for various welding processes and positions. Students that complete the

three course sequence should be prepared for Entry Level Welding Certification, as defined by American Welding Society, QC10.

Dual Credit Welding 3: Advanced Welding – 605787: Full year – 1-2 credits; 11th, 12th

Prerequisite: Welding 2 and instructor recommendation

Welding 3 is a course designed to teach more advanced techniques and skills related to cutting and welding applications. Welding and cutting skills developed in Welding 1 and Welding 2 will be used to satisfactorily complete a series of industry certification tests. Following the completion of this course, including successful passage defined by American Welding Society QC10.

Welding gloves, safety glasses, and steel-toed leather boots are required for Lab Safety. Students will take certification tests for various welding processes and positions. Students that complete the three course sequence should be prepared for Entry Level Welding Certification, as defined by American Welding Society, QC10.

Dual Credit Welding 4: Certified Welding Practicum- 615787: Full year- 1 credit; 12th

Prerequisite: Welding 3 and Entry Level Welding Certification

Welding 4 is a course designed to further welding skills beyond Entry Level Certification. Students will focus on opportunities to mentor younger welders and practice advanced welding techniques. This additional training will provide valuable experience that can transition to prospects in the job market or further post-secondary training.

Manufacturing

Machining I: – 625781: Full year – 1-2 credits; 11th, 12th

Prerequisites: none

Machining I is designed to provide students with the skills and knowledge to be effective in production environments as a machinist, CNC operator, or supervisor. Upon completion of this course, proficient students will demonstrate safety practices concerning machining technology, proper measurement and layout techniques, reading and interpreting drawings and blueprints, production design processes, and quality control procedures. Students will be able to effectively communicate design solutions to others, applying basic problem-based learning procedures to hands-on projects. Design solutions will include subtractive manufacturing (milling and drilling) as well as additive manufacturing (3D design and printing). Standards in this course are aligned with Tennessee State Standards for English Language Arts & Literacy in Technical Subjects and Tennessee State Standards in Mathematics.

**Machining II: – 625781: Full year – 1-2 credits; 11th, 12th
(Will be offered in the 2017-2018 school year)**

Prerequisites: Machining 1

Machining II is an advanced level contextual course that builds on the introductory skills learned in the entry-level manufacturing and machining courses, stressing the concepts and practices in a production environment supported by advanced manufacturing and engineering facilities. Students will work individually and as teams to design, produce, and maintain products that are defined by detailed technical specifications. Emphasis is placed on quality control, safety and engineering codes and standards, and production-grade machining systems, building on the learner's past knowledge, training, and current experiences. Upon completion of this course, proficient students will be able to examine and create specification drawings to plan and implement the manufacture of products, prototypes, and machine parts to specifications. They will also measure, examine, trouble-shoot, and test completed systems to check for defects and conformance to specifications. Standards in this course are aligned with Tennessee State Standards for English Language Arts & Literacy in Technical Subjects and Tennessee State Standards in Mathematics.

Dual Enrollment Mechatronics I – 606089: Full year – 1-2 credits; 11th, 12th

Prerequisites: Machining 1 or 2

Mechatronics I is an applied course in the manufacturing cluster for students interested in learning more about careers as a mechatronics technician, maintenance technician, electromechanical technician, and manufacturing engineer. This first of two courses covers basic electrical and mechanical components of mechatronics systems as well as their combined uses with instrument controls and embedded software designs. Upon completion of this course, proficient students are able to describe and explain basic functions of physical properties and electrical components within a mechatronic system. They can logically trace the flow of energy through a mechatronic system and can communicate this process to others. They know how to effectively use technical documentation such as data sheets, schematics, timing diagrams, and system specifications to troubleshoot basic problems with equipment. Finally, they develop strategies to identify, localize, and correct malfunctioning components and equipment. Standards in this course are aligned with Tennessee State Standards in English Language Arts & Literacy in Technical Subjects and Tennessee State Standards in Mathematics.

Dual Enrollment Mechatronics II – 606090: Full year – 1-2 credits; 11th, 12th

Prerequisites: Mechatronics 1

Mechatronics II is an advanced course in the manufacturing career cluster for students interested in learning more about such careers as mechatronics technician, maintenance technician, or electromechanical technician. Following the groundwork of mechanics and electronics laid in Mechatronics I, this course covers basics of pneumatic, electro pneumatic, and hydraulic control circuits in a complex mechatronic system. In addition, the course addresses basic digital logic and programmable logic controllers (PLCs) employed in the mechanical, electronic, and control systems in a mechatronics system. Upon completion of this course, proficient students are able to explain the interrelationships of components and modules within a complex mechatronic system. They understand the differences between hydraulic and pneumatic fluid power and can explain the scientific principles that apply. They also use technical documentation (such as datasheets, circuit diagrams, displacement step diagrams, timing diagrams, and function charts) to troubleshoot and resolve malfunctioning pneumatic and hydraulic components and circuits. They demonstrate understanding of the role of programmable logic controllers (PLC) in mechatronic systems and the ability to write, debug, and run basic ladder logic. Standards in this course are aligned with Tennessee State Standards for English Language Arts & Literacy in Technical Subjects and Tennessee State Standards in Mathematics.

Robotics Applications & Innovations I: 605834: Full year – 1 credit; 11th, 12th

Prerequisite: Instructor approval. Applicant's transcript must reflect appropriate experience and abilities in science, technology, engineering and mathematics.

This course builds on the content and critical thinking framework of Mechatronics 2. Students will follow the engineering design process and apply basic programming skills to complete assignments and projects.

Robotics Applications & Innovations II: 605836: Full year – 1 credit; 12th

Prerequisite: Instructor approval. Applicant's transcript must reflect appropriate experience and abilities in science, technology, engineering and mathematics.

This course builds upon STEM/Robotics Applications & Innovations I. A major focus of this course is to expose students to the study of robotic and manufacturing systems, planning, and the integration of automation into a manufacturing process. This course explores modern materials and manufacturing methods, individual processes, systems, and careers. In addition to technical concepts, the course incorporates finance, ethics, and engineering design. This reflects an integrated approach that leading manufacturers have adopted to improve safety, quality, and efficiency. An understanding of the historical and current uses of robots and automated systems; programmable circuits, interfacing both inputs and outputs; design standards for engineering and manufacturing professions; and testing and maintenance of robots and automated systems. Students will analyze, design, and build robotics systems. While implementing these designs, students will continually hone their interpersonal skills, creative abilities, and understanding of the design process. Students will apply knowledge gained throughout the course in a final open-ended design problem. Alternatively, senior (12th grade) students will use their innovative problem solving and critical

thinking skills to “create in the classroom” in their realization of a hands-on original application. They will be responsible for delivering progress reports and making final presentations of their project to an outside review panel consisting of practicing engineers and scientists.

HEALTH SCIENCE ACADEMY

The mission of the Academy is to provide a comprehensive academic program that allows students opportunities to explore health care careers in a positive learning environment. The vision is that ORHS Health Science Academy graduates will transition seamlessly into the workforce and/or post-secondary education associated with health care, with some college dual credit that provide for an early start on accelerated degrees, scholarships, and preferential employment. The program provides exposure to the full spectrum of health care careers, participation in hands-on experience with health care providers, association with a learning community of students with common goals, ongoing partnerships with health providers and educational institutions, and promotion of a positive self-concept and healthy lifestyle. College dual enrollment is available through Roane State Community College for Medical Terminology, (HIT 107) through the Clinical Internship Only. Dual enrollment in Nursing Assistant course is offered through Tennessee College of Applied Technology. (Certification available).

Available Certifications: Pharmaceutical Technician Certification; Certified Nursing Assisting
Dual Enrollment: Roane State Community College and Tennessee College of Applied Technology
Aligned Student Organizations: HOSA

Health Science 1: Medical Services – 605506: Full year – 1 credits; 10th, 11th, 12th

Prerequisite: Completion of Biology with minimum grade of C; may be taken as a clinical internship prerequisite

This course provides knowledge and skills to maintain or change to the health status of an individual over time. This could include careers such as dental, dietetics, medical assistance, home health, nursing, pharmacy, respiratory, social work, nutritionist, Physician, Psychiatrist, Psychologist, Veterinarian, Gerontology Service Provider, Medical Practice owner, Attorney for health care, and others.

Health Science 2: Rehabilitative Services– 605503: Full year – 1 credits; 10th, 11th, 12th

Prerequisite: Completion of Biology with minimum grade of C; maybe taken as a clinical internship prerequisite.

This course will focus on enabling the person to live to the fullest capacity possible. Units will include sports medicine, physical therapy, occupational therapy, speech / language therapy, sports medicine, art, music, dance therapy, and others.

Health Science 3: Dual Enrollment Nursing Education 606000: Semester – 1 credit; 11th - 12th

Offered from Tennessee College of Applied Technology on Oak Ridge Schools Campus

Prerequisites: Completion of Biology with minimum grade of C. Students may enroll after completing Medical Therapeutics and/or Rehabilitation Careers.

Enrollment is by submitted application and instructor/advisory board approval only and is limited to 15 students. Dual enrollment requires 2.5+ GPA and a score of 19 on each section of the ACT.

Approximate costs:

Background check: \$27 (you must provide a receipt before registering—it is non-refundable).

Liability insurance \$15

Navy scrubs for clinical experience: \$40

Written and skills CNA test: \$90.

Students should have proper shoes and a watch with a second hand.

Nursing Education consists of 18 units of study dealing with direct bedside nursing care. Students can be registered by the Tennessee Department of Health—after the completion of the course, 100 hours clinical and theory, passing a state test (both written and skills)—and will be job ready. Jobs include registered nurse, clinical nurse specialist, nurse practitioner, nurse midwife, nurse anesthetist, forensic nurse, and other occupations.

This Dual Enrollment course includes theory and clinical training in basic nursing skills; patient personal care and hygiene/ communication, and interpersonal interaction; ethical and legal responsibilities; infection control methods; safety measures; rehabilitation and restorative care; and patient mental health needs. Employment as a Certified Nurse Assistant typically requires the person to meet general health standards, and requires heavy physical tasks such as lifting, pushing, or pulling required objects up to 50 lbs. It also requires lifting clients who might weigh up to 200 pounds. For employment, aides must be in good health; a physical exam might be required; and a criminal background check is generally a prerequisite. Aides should be tactful, patient, understanding, emotionally stable, and dependable. They should desire to help people. Upon successful completion of the course materials and 120 required hours of training (one period per day in a semester-long class plus 25 evenings of clinical experience hours), students will be awarded a certificate and a grade report that serve as documentation of the successful completion and the training hours attended. These students are then eligible to sit for the State of Tennessee's Nurse Aid Test to become a Certified Nurse Assistant (CNA).

Health Science Clinical Internship 605511 Semester – 1 credit; 12TH
Dual Enrollment Medical Terminology 605501- Semester- 1 credit; 12th
Pharmacological Sciences 606133 (Pharmacy Technician Certification Training) – 1 credit; 12TH

Prerequisites: Completion of Biology with minimum grade of C. Students may choose to complete a clinical internship after completing Medical Services and/or Rehabilitative Services.

Must register for both courses. Classes will meet 1st and 2nd periods. Enrollment limited to 15 students. Progression into the clinical internship component is also contingent upon continual attainment of the Health Science Academy clinical internship quality indicators during the first semester course.

First Semester – Medical Terminology

RSCC Medical Terminology HIT 107 Dual Enrollment – 3 college credits

Diagnostic Medicine creates a picture of an individual's health status at a single point in time. This could include careers as cardiology, imaging, medical laboratory, radiography, nuclear medicine, stereotactic radiosurgery, speech pathologists, respiratory therapist, clinical laboratory technician, pathologists, histotechnologist, orthotist, plastic surgeon, prosthetist, prosthodontist, and others.

Second Semester – Clinical Internship/Elective Courses

Students may choose to complete a clinical internship after completing Medical Services, Diagnostic Medicine, and/or Rehabilitative Services. The internships are designed to be completed in a hospital, nursing home, rehab center, medical office, or other health care facility. During the internship, student may also enroll in elective courses. Costs: clinical internship embroidered uniform, physical exam/TB test, immunizations, CPR Certification.

Anatomy and Physiology Honors – 423251: Full year – 1 credit; 11th, 12th grades

Prerequisite: Chemistry

Anatomy and Physiology is the study of the body's structures and respective functions at the molecular, cellular, tissue, organ, systemic, and organism levels. Students explore the body systems through laboratory investigations, models, diagrams, and/or comparative studies of the anatomy of other organisms. The study of anatomy and physiology prepares students for a variety of pursuits such as health care, sports, and fitness careers, as well as for taking an active part in their own health and wellness.

A \$20 lab fee is requested.

ENGLISH

The goals of the English Department include helping each student to develop the abilities to think, read, write, speak, and listen with skill and creativity. These goals in conjunction with the ORS Language Arts Scope and Sequence are integral parts of all courses in the English program. The department also offers (by teacher recommendation only) courses for students who have special needs in thinking, reading, and writing.

The English Department offers four programs of study: Advanced Placement Program, College Preparatory

Program, General Preparatory Program, and Developmental Program. The Advanced Placement Program is offered for students who plan to earn college credit for work done in high school English. College credit depends on the student's score on the Advanced Placement Examination in English Literature and Composition taken in the spring of the senior year. The College Preparatory Program provides the preparation needed for success in college freshman English. The General Preparatory Program is designed for students who need a stronger foundation in language, reading, and writing skills. Many of these students plan to attend two-year community colleges, to pursue advanced technical/vocational training, or to enter the job market after graduation. The Developmental Program is for students who experience major difficulty in reading and writing.

The English Department offers elective courses in creative writing and journalism. A course in English as a Second Language (ESL) is also provided for students identified as English Language Learners (ELL).

Most English courses have a summer reading assignment. Students are expected to read and to respond in various ways to a novel or non-fictional book. This assignment is made during the last two weeks of the previous school year.

Students work with computers as part of the composing, revising, and editing process. Because teachers require some papers to be produced by computer, entering freshmen should have keyboard skills or should take a keyboarding course by the end of the sophomore year.

Please read the course descriptions carefully as you select your English courses. Your English teacher will make recommendations based on student needs, performance, and ability.

RECOMMENDED PROGRAM OF STUDY

ADVANCED PLACEMENT PROGRAM

- 9th Grade: Freshman English Honors
- 10th Grade: Combined Studies Sophomore English, Honors or Sophomore English, Honors
- 11th Grade: Junior AP: English Literature and Composition
- 12th Grade: Senior AP: English Literature and Composition

COLLEGE PREPARATORY PROGRAM

- 9th Grade: CP Freshman English, Honors or Freshman English
- 10th Grade: Combined Studies Sophomore English Honors; Sophomore English Honors; or CP Sophomore English
- 11th Grade: CP Junior English*
- 12th Grade: CP Senior English

*With teacher recommendation, students who have an average of B+ or higher in Junior English may take Senior AP English. A major author project will be required for students who did not take Junior AP.

GENERAL PREPARATORY PROGRAM

- 9th Grade: CP Freshman English
- 10th Grade: CP Sophomore English
- 11th Grade: General English 3*
- 12th Grade: General English 4

DEVELOPMENTAL**

- 9th Grade: English I Workshop
- 10th Grade: English 2 Workshop
- 11th Grade: English 3 Workshop
- 12th Grade: English 4 Workshop

*With teacher recommendation, students who have an average of B+ or higher in English 3 may take Senior English.

**Non-approved NCAA classes in English: English 1 Workshop, English 2 Workshop, English 3 Workshop, and English 4 Workshop

English Sequencing

Freshman	Sophomore	Junior	Senior	
English 1 Workshop	CP Sophomore English	CP Junior English	CP Senior English	
		English 3	English 4	
	English 2 Workshop	English 3	English 4	
		English 3 Workshop	English 4 Workshop	
	Freshman English	Sophomore Honors	Junior AP English: Literature and Composition	Senior AP English: Literature & Composition
		CP Sophomore English	CP Junior English	CP Senior English
Freshman Honors	Combined Studies Sophomore Honors	Junior AP English: Literature and Composition	Senior AP English: Literature & Composition	
	Sophomore Honors		CP Senior English	

DEVELOPMENTAL PROGRAM

Developmental courses (English Workshops) are provided for students who are functioning two to three grade levels below ninth grade in reading and writing. Students may need to take one or both courses depending on their language weaknesses. This program is designed to bring students to grade-level as quickly as possible so that they can enter the regular English program by the end of ninth or tenth grade. A third course, English 3 Workshop is provided for juniors and seniors who have difficulty in written expression.

ENGLISH AS A SECOND LANGUAGE

English as a Second Language is offered for one year (1 credit) or for two years (2 credits) in English for ELL students.

POLICY ON CREDITS AND FAILURES

The student may earn only one credit a year in English. To ensure competency in the grade level skills established by the Oak Ridge Schools Language Arts Scope and Sequence, the student should repeat the course failed rather than substitute another English course.

English as a Second Language - 803075: Full year - 1 credit; 9th, 10th, 11th, 12th

Prerequisite: Qualifying score on the ELDA (English Language Development Assessment) or LAS Links Placement Test. May be taken for one or two periods. ESL is for English Language Learners (ELLs). The course focuses on fostering English language acquisition through content-based instruction. Listening, speaking, reading, and writing skills are the focus of the course. A second credit may be earned for a second year.

Freshman Year:

English 1 Workshop - 803001: Full year - 2 credits; 9th (1 credit in English and 1 credit in Electives)

This course is designed for students who have been formally assessed as having serious difficulties in reading and writing. Placement determined through RTI committee for Tier 3 Intervention. Assessments used to determine a student's area of need include the Gates-McGinitie Reading Test, EXPLORE and TCAP scores, and writing samples. The student's academic difficulties and deficiencies will be assessed and analyzed in order to have a holistic view of the student.

Developmental reading skills are taught through various fiction and nonfiction literary selections chosen by the student and/or teacher. Students develop critical thinking and discussion skills through the study of a multicultural selection of short stories, nonfiction, novels, poetry, and drama. Students practice recognizing ideas, arranging events in sequence, and supporting opinions with examples. The writing responses emphasize organizing for clarity. Writing assignments are designed to improve reading and writing skills and often stress summaries and explanations of the reading.

Daily attendance, completion of assigned work, reading practice, and mastery of state standards will make for success in the course.

CP Freshman English - 813001: Full year - 1 credit; 9th

This course begins a four-year progression of literary analysis in various literary genres. Students develop critical thinking and discussion skills through the study of a multicultural selection of short stories, nonfiction, novels, poetry, and drama. Special emphasis is given to researching, planning and writing coherent and interesting compositions as well as a review of the fundamental principles of grammar. A year-long formal study of vocabulary is also included.

Freshman English, Honors - 823001: Full year - 1 credit; 9th

This course is designed for students who have mastered the fundamentals of grammar and paragraph writing. The course includes an introduction to the research process and literary analysis in various genres. Students develop critical thinking and discussion skills through the study of drama, both modern and classic; novels, both modern and classic; various elements of nonfiction: autobiography, biography, and personal narrative; and poetry. Students write in a variety of formal and informal modes. A year-long formal study of vocabulary is also included.

Sophomore Year:

English 2 Workshop – 833001: Full year - 1 credit; 10th

This course is designed for students who have been formally assessed as having difficulties in reading or written expression. Placement determined through RTI committee for Tier 3 Intervention.

Developmental reading skills are taught through various literary selections chosen by the student or teacher. Students practice recognizing ideas, arranging events in sequence, and supporting opinions with examples. The writing responses emphasize organizing for clarity and emphasis. Writing assignments often stress summaries and explanations.

The course provides directed practice in reading and writing. Students are expected to progress from their initial level of reading and writing to higher levels through their own efforts; however, parental support and supervision are essential.

Daily attendance, completion of assigned work and independent reading practice will make for success in the course.

CP Sophomore English - 813002: Full year - 1 credit; 10th

This course is designed for students with grade-level reading and writing skills. Most students enrolled in this course plan to continue education beyond high school. The course emphasizes writing, reading, thinking, and discussion. Students write a variety of essay forms including analysis and argumentation. They also write a research paper. Literature study includes short stories, nonfiction, essays, dramas, novels, and poems. A summer reading book will be assigned in May.

Sophomore English Honors - 823002: Full year - 1 credit; 10th

Sophomore English, Honors is a course in world literature. This course is designed for college-bound students with above-average reading and writing abilities. Because this course is in preparation for Junior Advanced Placement English Literature and Composition, students taking this course practice rigorous thinking and writing skills necessary for their future success at the AP level and are expected to read and write extensively. Students explore the roots of Western civilization and examine Greek, Roman, Medieval, Renaissance, and modern world cultures by reading and discussing representative works. Students practice literary research and formal essay writing aligned with Common Core Standards. Students enrolling in this

course should be comfortable in large and small group situations. In addition, students need to be self-disciplined and have high academic motivation.

Combined Studies Sophomore English, Honors – 833002- Full year- 1 Credit

Combined Studies is a team-taught AP/Honors course in world history and world literature. This course is designed for students with above-average reading and writing abilities. Because students taking this course practice thinking and writing skills necessary for success on the Advanced Placement World History Exam, the AP grading scale is used. In the English portion of the course, students read complete major works from and novels about major historical periods and cultures: Greek, Roman, Medieval, Renaissance, and contemporary. In preparation for the AP World History Exam, major selections from non-European literature are also included. Students are expected to read and to write extensively.

Students enrolling in this course should be comfortable in large and small group situations and should enjoy working with several teachers. In addition, students need to be self-disciplined and have high academic motivation.

Junior Year:

English 3 Workshop – 803002: Full year – 1 credit; 11th, 12th

This course is open only to students who have been formally identified through assessment as having difficulty in written expression. This course emphasizes elaborating, sequencing, and organizing for written clarity and fluency. The composition program focuses on sentence structure, paragraph structure, and multi-paragraph papers. Significant time will be spent preparing for the spring writing assessment, with practice in narrative, expository, and argumentative writing. Literature selections include significant pieces of American Literature.

English 3 - 803003: Full year - 1 credit; 11th, 12th

English 3 is a course designed for those students who may go to a community college or vocational institute after high school. This course takes a thematic approach to our nation's literature. The major units of study include units on the family, peer pressure, rebellion, horror/suspense, and the American Dream. Each section includes a study of American authors and a variety of genres. Major writing assignments may include analytic and persuasive essays, creative writing, and a research project. The persuasive essays will focus on preparation for the TCAP writing assessment.

CP Junior English - 813003: Full year - 1 credit; 11th

This course is designed for the college-bound student. Students explore the American dream, the Puritan tradition, the Romantic ideal and American realism by reading and discussing representative works of different genres. Students are instructed in literary research, formal essay writing, and creative writing. Special emphasis is given to critical and creative thinking skills and persuasive writing in order to prepare students for the eleventh grade TCAP writing assessment.

Junior AP English Literature and Composition - 813014: Full year- 1 credit; 11th

This course is designed for students who want a demanding college level course and/or who plan to take the Advanced Placement Examination in English Literature and Composition at the end of the senior year.

The course focuses on American literature from the colonial to the post modernist periods. Literary periods such as Puritanism, transcendentalism, realism and existentialism are examined through literary analysis, expository writing, and discussion. Students choose a major author for an independent year-long study culminating in an analytical paper and an oral presentation. Above-average writing skills and self discipline for independent study are necessary for success in this course.

Senior Year:

English 4 Workshop - 804005: Full year - 1 credit; 12th

This English course is designed for students who plan to enter a community college, vocational school, or the job market immediately after high school. English 4: Workshop is arranged thematically, incorporating

traditional British works with other appropriate novels, informational texts, poems, and short stories. This class includes practice in research, writing, collaboration, communication, public speaking, and presentation skills.

English 4 - 853005: Full year - 1 credit; 12th

This course follows a developmental writing and reading program for students planning to pursue a two-year degree or to attend a vocational school. Patterns of essay development are explored. Special skills, such as taking essay exams, writing a report, writing a resume and cover letter, analyzing literature, and using the library and internet are included. Readings include classic British texts, as well as contemporary novels and articles. Students will learn active reading strategies and note-taking skills. This class includes practice in research, public speaking, and general presentation skills.

CP Senior English - 813005: Full year - 1 credit; 12th

This course is designed for continued refinement of literary analysis and writing skills. Students who take this course enroll in post-secondary institutions that range from highly selective schools to state universities and community colleges. Class work includes extensive reading in British literature arranged around a review of the genres of drama, short story, poetry, novel, and essay. Literary selections vary from early classic tales and writers to contemporary pieces. Students reinforce skills with vocabulary work and a speech unit. This course includes a mandatory major author research paper and other writing assignments. A vocabulary workbook is required.

Senior AP English Literature and Composition - 823014: Full year - 1 credit; 12th

This course is designed for students who want a demanding college level course and/or who plan to take the Advanced Placement Examination in English Literature and Composition at the end of senior year.

This course focuses on British literature, literary analysis, and expository writing. Style is studied as a means of understanding and appreciating a literary work and as a tool for improving communication in writing and speaking. Students write essays of literary analysis as well as journals and other forms of expressive writing. They also have opportunities to show their understanding and appreciation of literary selections through various forms of artistic expression. During the first semester, the study of British literature concentrates on major works of the twentieth century with independent research on one modern British writer. The second semester is a chronological survey from the Middle Ages through the Victorian Age. In the second semester survey, at least one major work of the period (i.e. *The Canterbury Tales*, *Hamlet*) is studied in addition to short selections from the period. Group and individual research for this semester focuses on a literary period and two major works of the period. A formal year-long study of vocabulary is also included.

Electives:

Theatrical Literature and Performance- 803081: Full Year- 1 credit; 10th, 11th, 12th

This course explores multiple facets of dramatic performance and provides students with an opportunity to develop stage presence, acting skills, and the literature and poise necessary to effectively communicate in and support dramatic performances. Students will have multiple opportunities to speak and perform before their peers by engaging in storytelling, debate, reader's theater, and ensemble work. Students will learn the various aspects of preparation for and performance of play productions, including scripting, acting, directing, house/stage managing, costuming, and technical management. In addition to stage production development, students will be expected to read a variety of plays and produce written analyses.

Branching Out (Applied Creative Writing) - 833012: One semester - .5 credit; 10th, 11th, 12th

This course is designed for those students who are interested in developing creative writing skills along with publication skills. Students will produce original essays, poems, short-stories, and short literary dramas. Additionally, students will have an opportunity to publish Oak Ridge High School's literary magazine titled Branching Out. Students who enroll in this course should possess good writing skills and a desire to work with media publications.

Creative Writing - 813012: One semester - .5 credit; 10th, 11th, 12th

Prerequisite – Sophomore, junior, or senior students who have a 'C' grade or higher in their college preparatory English classes.

This course is open to any student who is interested in the study and practice of descriptive and narrative writing. Poetry, short stories, children's stories, personal essays, and scripts provide models for students to discuss and imitate. Students work on finding individual voice, enhancing description, developing characters, improvising with imagery and language, experimenting with different genres and forms, and increasing self-confidence. Journal writing and peer editing are critical elements of the course. Students are expected to develop and submit some work for publication or competition.

With instructor approval, a second half credit may be earned for an additional semester's work.

Journalism - Oak Log - 863008: Full year - 1 credit; 10th, 11th, 12th

Prerequisite: Students are selected by application only. Permission to take *Oak Log* requires the signature of the adviser on the registration forms.

Students are involved in the planning and production of the school yearbook. Students are required to conduct interviews and to write articles. They assist in page design and also fit copy, write headlines and captions, take photographs, and use Macintosh computers for desktop publishing. Students are required to sell advertising to help finance the book's production. *Oak Log* work requires after-school time. Students must be able to work independently and to meet deadlines. Additional credits may be earned for enrollment in consecutive years.

Journalism, Honors 823008: Full year- 1 credit; 10th, 11th, 12th

This course is open to students who have enrolled in *Journalism – Oak Log* through the normal procedures (teacher recommendation, adviser approval and signature on course plan forms submitted to counselor) and who wish more extensive in-depth experience in the field. This course is to be taken in addition to *Journalism – Oak Log*. (Students must be enrolled in both courses.) Students are expected to fulfill requirements of a regular journalism class in accordance with the state-recommended journalism curriculum, to hold leadership editorial and/or business positions on a student publication (the *Oak Log* yearbook), to become proficient with desktop publishing procedures, and to select and successfully complete one or more independent projects that relate to and support the needs of the student publication during each grading period.

MATHEMATICS

In the 2016-2017 school year the Mathematics Department will continue to implement curricular and technology standards prescribed by the National Council of Teachers of Mathematics, the Tennessee State Secondary Mathematics Framework and credit requirements, integrated-topics textbooks and state and national testing programs. ORHS Mathematics curriculum maps and program information are available on the ORHS website under Academic Departments, Mathematics.

All Tennessee high school students are required to earn four credits in mathematics, namely Algebra 1, Geometry, Algebra 2, as well as one additional course beyond Algebra 2. All students must be enrolled in a math class each year. The State of Tennessee has enacted a work/college-ready curriculum which includes a Bridge Math course for students who have not scored 19 or higher on the ACT by the beginning of their senior year.

In order to better prepare students for the technological world in which they must live and work, the Oak Ridge Schools require all students to have a graphing calculator for classroom and homework use. Students may rent a calculator through the schools or acquire one elsewhere. Although a specific brand/model graphing calculator is not required, the Texas Instruments TI-84+ or TI-89 will be used as the "official calculator" in specific math classes. The "official calculator" is the model that the school system will rent to students enrolled in a course and will be the calculator used by the teacher for demonstration purposes. The table below provides a summary of the calculator requirement.

COURSE	OPTIONS	OFFICIAL CALCULATOR
Algebra 1-T, Algebra 1 Workshop, CP Algebra 1, AGATE 1 & 2, Geometry Workshop, Geometry T, CP Geometry, Geometry Honors, CP Algebra 2, Algebra 2/Trig, Algebra 2/Trig Honors, Algebra 3 with Trig, AP Statistics, Math 4	Purchase or rent TI-84+	TI-84+
Precalculus Survey, Precalculus Analysis Honors, AP Calculus AB and BC, Post-AP Calculus	Purchase or rent TI-89	TI-89

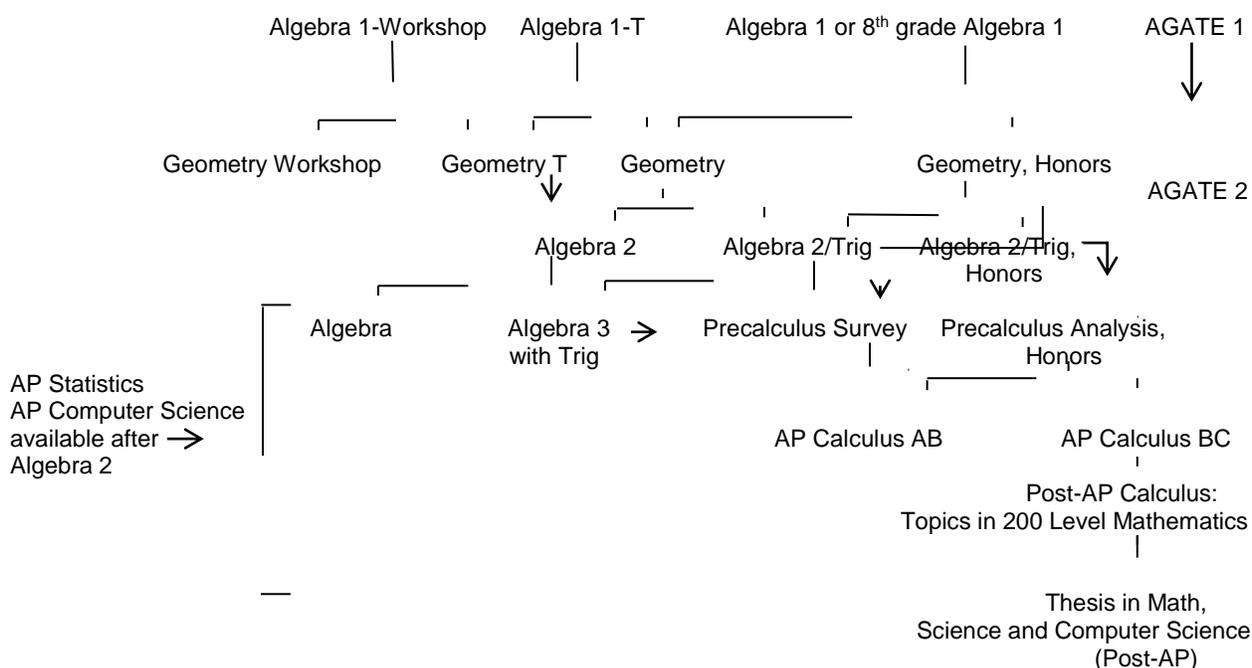
To preserve equity in testing situations, certain calculators with advanced capabilities may not be allowed for use on classroom tests. In order to promote further use of technology the Mathematics Department plans to use academic computing facilities whenever possible to enhance instruction.

The Mathematics Department attempts to meet the mathematical needs and interests of all students by offering a wide range of mathematics courses. Because of this diversity of offerings and the fact that mathematical skills are progressively developed and reinforced throughout the courses, a recommended ordering of courses is presented below. All course placements shall be made via a mathematics teacher recommendation. A grade of D in a course does not indicate proficiency, and the teacher will recommend that the student repeat the course or receive remediation in the form of credit recovery before continuing to a subsequent course.

Recommended Courses for Math Sequencing

Freshman	Sophomore	Junior	Senior
Algebra 1 Workshop	→ Geometry Workshop → → Geometry T →	→ CP Algebra 2 →	→ Algebra 3 → → CP Algebra 3 w/ Trigonometry →
Algebra 1T	→ Geometry T →	→ CP Algebra 2 →	→ Algebra 3 → → CP Algebra 3 w/ Trigonometry →
Algebra 1	→ CP Geometry → → Geometry, Honors →	→ CP Algebra 2 with Summer School Trigonometry → → CP Algebra 2 w/ Trigonometry →	→ CP Precalculus Survey → → AP Statistics → → AP Computer Science → → CP Precalculus Survey → → AP Statistics → → AP Computer Science →
CP AGATE 1	→ CP AGATE 2 →	→ CP Precalculus Survey →	→ AP Calculus AB → → AP Statistics → → AP Computer Science →
Geometry, Honors	→ Algebra 2 w/ Trigonometry, Honors →	→ Precalculus Analysis, Honors →	→ AP Calculus BC → → AP Calculus AB → → AP Statistics → → AP Computer Science →
Algebra 2 w/ Trigonometry, Honors	→ Precalculus Analysis, Honors →	→ AP Calculus BC → → AP Calculus AB →	→ Post- AP Calculus and Thesis → → Post-AP Calculus → → AP Statistics → → AP Computer Science →
			→ AP Calculus BC → → AP Statistics → → AP Computer Science →

Vertical Chart for Math Recommended Course Sequencing



IMPORTANT: ELECTIVES: Read course descriptions
Math Student Service: 0.5 or 1 credit
Computer Programming A: 0.5 credit
Computer Programming B: 0.5 credit

AP Computer Science: 1 credit
Pre-Thesis in Math, Science and Computer Science: 1 credit

Algebra Workshop – 333102: Full year, 2 Periods; 1 elective credit in Algebra 1A or 1 State credit in Algebra 1B and 1 credit in Math Intervention; 9th

Prerequisites: Placement determined through RTI committee for Tier 3 Intervention

This team-taught course will meet 2 consecutive class hours daily so that additional time can be provided for pre-algebra review, algebraic skills practice and laboratory activities to support algebraic thinking. This course includes all curriculum topics listed under the Algebra 1 course below. Students completing the Algebra 1B credit are required to take the TnReady Exam for Algebra 1 with this exam score figured as a part of the student's final grade in the course.

Algebra 1-T – 331024: Full year – 2 periods, 1 credit in CP Algebra and 1 credit in Math Intervention; 9th

Prerequisites: Placement determined though RTI Committee for Tier 2 or 3 intervention

This course will meet for 1 class period of instruction and add 1 period teacher-directed intervention and support daily to reinforce the learning process in algebra. The course includes all curriculum topics listed under the Algebra 1 course. Students completing the Algebra 1 credit are required to take the TnReady Exam for Algebra 1 with this exam score figured as a part of the student's final grade in the course.

CP Algebra 1 - 313102: Full year - 1 hour; 1 State credit; 9th

Prerequisites: Proficiency in computational and pre-algebra skills

This course covers the rules and operations of algebra on real number variables and includes working with equations and inequalities, functions and graphing, exponents and radicals, polynomials, quadratics, absolute

value, rational equations, probability and statistics and geometric concepts. This course is designed to address all of the Common Core Algebra 1 topics and students are required to take the TnReady Exam with the exam score figured as a part of the student's final grade in the course.

CP AGATE Math A: 323081

CP AGATE Advanced Algebra 1: 303132: Full year– Must take both extended periods, 2 Credits; 1 State credit in Algebra 1, 1 elective credit in Math; 9th

Prerequisites: Proficiency in computational and pre-algebra skills Interest in rigorous mathematics and motivated to reach an AP mathematics course by their senior year.

This course is designed to address all of the Common Core Algebra 1 topics as well as half of the Common Core Geometry topics. Students would be part of a team-taught environment, with both teachers and students "looping" to the next course, AGATE 2. Students would take the TnReady Exam in Algebra 1 at the end of AGATE 1 with the exam score figured as a part of the student's final grade in the course.

CP AGATE Advanced Geometry: 303133

CP AGATE Advanced Algebra 2 with Trigonometry: 303134: Full year – Must take both extended periods, 2 Credits; 1 State credit in Geometry; 1 State credit in Algebra 2; 10th

Prerequisites: Open to students who have successfully completed AGATE 1.

This course is designed to complete Common Core Geometry topics started in AGATE 1, to address all Common Core Algebra 2 topics and to give a foundation in Trigonometry to prepare students for Precalculus Survey. Students would take the TnReady Exam in Algebra 2 at the end of AGATE 2 with the exam score figured as a part of the student's final grade in the course.

Geometry T – 331084: Full year – 2 periods, 1 credit CP geometry; 1 credit math intervention; 10th

Prerequisites: Placement determined though RTI Committee for Tier 2 or 3 intervention

This course will meet for 1 hour of class instruction and 1 hour of teacher-directed intervention and support daily to reinforce the learning process in geometry. The 2 periods may or may not be consecutive. This course is organized around the system of deductive logic. Course work is related to the learning of geometric facts and emphasizing applications, most of which are algebraic in nature. This course contains the full scope and sequence of the Common Core Geometry curriculum.

CP Geometry - 323108: Full year - 1 credit; 9th, 10th

Prerequisites: Open to students who have completed Algebra 1 or Algebra 1-T at ORHS or who have completed 8th grade Algebra 1.

This is a course in Euclidean Geometry. The primary emphasis is on the development of deductive reasoning and analytical problem solving skills utilizing the relationships between geometric figures and their properties. This course contains the full scope and sequence of the Common Core Geometry curriculum.

Geometry, Honors - 333108: Full year - 1 credit; 9th, 10th

Prerequisites: Open to students who have a grade of A in Algebra 1 at ORHS or a minimum grade of B in 8th grade Algebra 1.

This is a comprehensive course which covers plane, solid, and analytic geometry concepts. This course contains the full scope and sequence of the Common Core Geometry curriculum.

CP Algebra 2 - 313103: Full year - 1 credit; 10th, 11th

Prerequisites: Open to students who have an Algebra 1 credit and a Geometry credit, with a minimum grade of C in each course.

This course includes all the Common Core topics of Algebra 2 at a depth considered appropriate preparation for Algebra 3 with Trigonometry. Students are required to take the TnReady Exam in Algebra 2 with the exam

score figured as a part of the student's final grade in the course. Junior and Senior Algebra 2 students making unsatisfactory progress toward earning this required State credit will be assigned to Algebra 2 Intervention.

CP Algebra 2/Trigonometry - 343103: Full year – 1 credit; 10th, 11th

Prerequisites: Open to students who have completed Algebra 1 and Geometry with a minimum grade of one A and one B in these courses.

This course includes all the Common Core topics of Algebra 2 and additional topics in Trigonometry at a depth considered appropriate preparation for Precalculus Survey. Students are required to take the TnReady Exam in Algebra 2 with the exam score figured as a part of the student's final grade in the course.

Algebra 2/Trigonometry Honors - 323103: Full year - 1 credit; 9th, 10th

Prerequisites: Open to students who have completed 8th grade Algebra 1 and Geometry, Honors with a minimum grade of B in each course or who have a grade of A in Algebra 1 and Geometry, Honors at ORHS. Unsatisfactory completion of the first semester of course work will result in a recommendation of student transfer to Algebra 2/Trigonometry.

This course includes all the Common Core topics of Algebra 2 and additional topics in Trigonometry at a depth considered appropriate preparation for Precalculus Analysis. A technology laboratory consisting of approximately 1.5 hours (outside of class) per nine weeks period is encouraged to increase proficiency on the graphing calculator. Students are required to take the TnReady Exam in Algebra 2 with the exam score figured as a part of the student's final grade in the course.

Algebra 3 –333124: Full year – 1 credit; 12th

Prerequisites: Open to students who have a credit in Algebra 2, but who seek additional reinforcement appropriate for college placement testing and workplace readiness. This course is required of students who have not scored 19 or higher on the ACT exam by the beginning of their senior year.

Emphasis is placed on reinforcing skills from the core high school math curriculum in Algebra and Geometry as well as basic Trigonometry and Discrete Mathematics. This course is considered a bridge to college and/or workplace readiness under the Tennessee State Board of Education Transition Policy.

Dual Enrollment Algebra 3 with Trigonometry - 313124: Full year - 1 credit; 11th, 12th

Dual Enrollment is for College Algebra 1 and 2 and open to student in the 12th grade.

Prerequisites: Open to students who have an Algebra 2 credit.

Trigonometry topics include the right triangle definition for the trigonometric functions and covers graphs, identities, triangle solutions, inverse functions, trigonometric equations and the unit circle.

The Algebra 3 topics, consistent with a college preparatory program, are: relations and functions, basic vector operations, sequences and series, conic sections and analytic geometry.

Dual Enrollment Precalculus Survey - 313126: Full year - 1 credit; 10th, 11th, 12th

Dual Enrollment is for College Algebra 1 and 2 and open to students in the 12th grade.

Prerequisites: Open to students who have completed Algebra 2/Trigonometry, Honors or Algebra 2/Trigonometry with a minimum grade of C in each component of that course or open to students who have a minimum grade of C in Algebra 3 with Trigonometry. Students with an Algebra 2 credit who complete Trigonometry in summer school with a minimum grade of B are eligible for enrollment in this course.

Emphasis is placed on a problem solving approach to topics which include: number theory, sequences and series, polynomial functions, probability, statistics, logarithmic and exponential functions, inequalities, linear programming, functions (inverse, arithmetic, and composite), trigonometric functions, complex numbers, analytic geometry, parametrics and vectors.

Precalculus Analysis, Honors - 323126: Full year - 1 credit; 10th, 11th, 12th

Prerequisites: Open to students who have completed Algebra 2/Trigonometry, Honors with a minimum grade of B. Unsatisfactory completion of the first semester of course work will result in a recommendation of student transfer to Precalculus Survey. Students completing Trigonometry in summer school are not eligible for enrollment in this course.

Emphasis is placed on calculator-enhanced problem solving and rigorous mathematical development of the following topics: number theory, sequences and series, limit theory, polynomial functions, probability, data analysis/statistics, logarithmic and exponential functions, trigonometric functions, analytic geometry, parametrics and vectors. A technology laboratory requiring approximately 3 additional hours (outside of class) per nine weeks period is strongly encouraged to enhance student proficiency on the TI-89.

AP Statistics - 323129: Full year - 1 credit; 10th, 11th, 12th

Prerequisites: Open to students who have completed Algebra 2 with a minimum grade of B.

The four major themes include: (1) exploratory analysis and the visualization of data to study patterns, (2) probability, (3) collection of data to formulate models, and (4) statistical inference to draw conclusions from the models. The AP Statistics exam will require the use of a graphing calculator. The AP Statistics exam is available for a fee for those students desiring to receive advanced placement credit at the college level.

Advanced Placement booklets with more detailed descriptions of the courses are available through the Statistics teacher or in the Counseling Office.

The Advanced Placement Testing Program will require the use of a graphing calculator on the AP Statistics exam. This component increases the instructional time needed for the integration of this technology into the AP curriculum. Students intending to take the AP exam will need extra instructional/technology laboratory time of approximately four additional hours (outside of class) per nine-weeks grading period.

**AP Calculus-AB - 323127: Full year - 1 credit; 11th, 12th
Dual Enrollment College Calculus 1**

Prerequisites: Open to students who have completed Precalculus Analysis, Honors or who have completed Precalculus Survey with a minimum grade of B.

This course will cover levels (A) and (B) seen under the AP Calculus-BC description.

AP Calculus-BC - 323128: Full year - 1 credit; 11th, 12th

Prerequisites: Open to students who have completed Precalculus Analysis, Honors with a minimum grade of B. This course will cover levels (A), (B) and (C) described below.

There are three levels of course work in the Advanced Placement Calculus curriculum:

- (A) Differential Calculus
- (B) Integral Calculus
- (C) Further applications of differential and integral calculus including formal integration, indeterminate forms, plane curve geometry, infinite series, and differential equations.

Advanced Placement curricular outlines with more detailed descriptions of the courses are available through the calculus teachers.

The Advanced Placement Testing Program will require the use of a graphing calculator on the AP Calculus AB and BC exams. This component increases the instructional time needed for the integration of this technology into the AP curriculum. Students intending to take the AP exam will need extra instructional/technology laboratory time of approximately four additional hours (outside of class) per nine-weeks grading period. The Advanced Placement Calculus AB and BC exams are available for a fee for those students desiring to receive advanced placement credit at the college level.

Post-AP Calculus: Topics in 200 Level College Mathematics

323199: Dual Credit in Matrix Algebra; 1 credit

343199: Dual Credit in Multivariable Calculus; 1 credit

363199: Dual Credit in Differential Equations; 1 credit

Prerequisites: Open to students who have completed AP Calculus BC with a minimum grade of C and a 4 or 5 on the AP Exam. Select students with high A averages from Precalculus Analysis, Honors will be considered for this course if it is taken simultaneously with AP Calculus BC. The latter students must receive the recommendation of the Precalculus Analysis, Honors instructor.

The first twelve weeks cover matrix theory and an introduction to linear algebra while the remainder of the year includes topics from multivariable calculus and differential equations. Topics in the course follow a typical sophomore college-level mathematics/engineering major course of study. The completion of the entire course is required to satisfy the math graduation requirement. Students have the opportunity for dual enrollment with Tennessee Tech University.

Pre-Thesis in Math, Science and Computer Science 313199: (Honors Course), Full year - 1 credit; 11th

Prerequisites: Open to students who have completed Precalculus Analysis.

This course is designed to teach the principles of performing and presenting scientific research. Students will engage in a research project for the first month of the course and spend the remaining time presenting results in a variety of formats (formal paper, poster and oral presentation). Analysis of the research will be performed with student-created computer programs along with existing programs.

Thesis in Math, Science and Computer Science (Post-AP)

333199: Full year - 1 credit

373199: Summer Research - .5 credit

Prerequisites: Open to students who have completed Post-AP Calculus.

This course is designed to draw upon the expertise of scientific professionals in the community to serve as advisors for the student's thesis project. The statement of the problem to be studied, methodology employed, results with analysis and conclusions will be presented by the student in a 18 – 20 page written document at the culmination of the project. Such projects must involve computer science work to receive credit.

Math Student Service - 353199: Full year - 1 credit or 343199: One semester - 0.5 credit; 12th (No State Math credit – ORHS elective credit)

Prerequisite: Open to students interested in mentoring/tutoring students in the following math courses: Algebra 1-T, Algebra 1 Workshop, Informal Geometry and Geometry T. Selection for service requires a student application (to be obtained from a math teacher) and recommendation of a math teacher. Students interested in working with students as an in-class teacher assistant and tutors are solicited. Students who are accepted will be active participants in classroom activities and will be expected to be proficient in the topics of the math course to which they are assigned.

COMPUTER PROGRAMMING COURSES

The following courses are designed in a semester format to allow for flexible scheduling by students. If the student has no experience in programming, Computer Programming 1 or Introduction to Computer Programming are the recommended entry level courses.

Computer Programming A - 313625: One semester - 0.5 credit; 9th, 10th, 11th, 12th

Prerequisites: Open to any student.

This course is an introduction to coding concepts such as conditions, loops, functions, and objects. The concepts will be learned by building computer programs and games. Emphasis will be given to problem solving through structured program development.

Computer Programming B – 313632: One semester - 0.5 credit; 9th, 10th, 11th, 12th

Prerequisites: Open to any student.

This course is a continuation of Computer Programming 1, but is flexible enough to accommodate students who did not take Computer Programming 1 or who have no programming experience.

AP Computer Programming 1: Principles – 323635: Full year- 1 Credit: 9th, 10th, 11th, 12th

Prerequisites: Open to any student who has successfully completed Algebra1 with an “A” or “B”.

AP Computer Science Principles focuses on foundational computing skills to help students understand the relevance of those computing skills to their college and career plans. Multidisciplinary in nature, this course teaches students how to analyze problems, use creative thinking, and create computational artifacts including programs. Throughout the course, students will collaborate to investigate real-world issues using computing. The course focuses on seven major ideas in computing: Creativity, Abstraction, Data and Information, Algorithms, Programming, Internet, and Global Impact.

AP Computer Science: Java – 313635: Full year - 1 credit; 10th, 11th, 12th

Prerequisites: Open to any student who has at least one semester of programming experience or has completed Algebra 2.

Students will follow the Advanced Placement Computer Science curriculum outline. AP booklets with a detailed course description are available through the AP Computer Science teacher or the Counseling Office. The major emphasis of this course is on programming methodology, algorithms, and data structures using JAVA. Applications are used to develop student awareness of the need for particular algorithms and data structures, as well as to provide topics for programming assignments to which the students can apply their knowledge. Treatments of computer systems and social implications of computing are integrated into the course work and not isolated as separate units. This course may be used as a math graduation requirement for Senior year if a student has received credits in Algebra 1, Geometry and Algebra 2 by the end of their Junior year.

MUSIC

A student may earn four credits in Instrumental Music, four credits in Vocal Music, and one credit in Theory and Harmony.

Band, Regular - 210996: Full year - 1 credit; 9th, 10th, 11th, 12th

Band is a year-long music performance class. Band members are expected to participate in marching band during the fall semester. Participation in Competitive Marching Band (CMB) is based on one’s knowledge and skills in the Fall CMB music and sets. Summer Band camp is highly recommended because it focuses solely on the Fall CMB music and sets. Students without adequate knowledge and skills in the Fall CMB music and sets are welcome and may participate as an alternate in the CMB. Students enrolled in band are expected to attend all performances and rehearsals. Students are expected to attend all after school rehearsals, generally two per week during marching season, but additional rehearsals may be called. Students are expected to perform at all football games, including playoff games, and three weekend marching contests. Students participating in marching band receive a ½ credit in Wellness C. After football season, this band performs at concerts and attends concert festivals. Regional (All East) and state clinics are an option for Regular Band students. Advanced credit is not available through the Regular Band.

Band, Honors - 230996: Full year - 1 credit; 9th, 10th, 11th, 12th

Band, Honors is a music performance class that includes all the requirements of Regular Band. In addition, students must audition for a concert clinic such as All State East or participate in another director approved non-audition concert clinic. Honors Band students are expected to maintain the highest standards of musicianship and citizenship.

Color Guard - 200996: One semester - .5 credit; 9th, 10th, 11th, 12th

This class is for students who have been selected as a member of the Guard. This class is open by audition only. Participation in Competitive Marching Band Guard (CMB) is based on one's knowledge and skills in the Fall CMB music and sets. Summer Band camp is highly recommended because it focuses solely on the Fall CMB music and sets. Students without adequate knowledge and skills in the Fall CMB music and sets are welcome and may participate as an alternate in the CMB. Guard members are expected to attend all after school rehearsals, generally two per week during marching season, but additional rehearsals may be called. Guard members also perform with the marching band at all functions including football games, playoff games and marching contests. Students who participate in color guard receive a ½ credit in Wellness C.

Advanced Women's Chorus - 200995: Full year - 1 credit; 9th, 10th, 11th, 12th

This class is open to intermediate - advanced female singers by audition only. The curriculum emphasizes sight reading, music theory, music history and vocal performance skills using a wide variety of musical styles. Several out of school performances are required. Position available for student accompanist.

Women's Chorus - 260995: Full year - 1 credit; 9th, 10th, 11th, 12th

This class is open to all singers. The curriculum emphasizes beginning music skills including; sight reading, basic music theory, music history and vocal performance skills using a wide variety of musical styles. Some out of school performances are required. Position available for student accompanist.

Advanced Men's Chorus - 230995: Full year - 1 credit; 9th, 10th, 11th, 12th

This class is open to intermediate to advanced male singers by audition or director signature. The curriculum emphasizes sight reading, music theory, music history and vocal performance skills using a wide variety of musical styles. Some out of school performances are required.

Men's Chorus- 250995 Full year - 1 credit; 9th, 10th, 11th, 12th

This class is open to all singers. The curriculum emphasizes beginning music skills including; sight reading, basic music theory, music history and vocal performance skills using a wide variety of musical styles. Some out of school performances are required. Position available for student accompanist.

Ensemble Choir, Honors - 240995: Full year - 1 credit; 10th, 11th, 12th

This class is open to advanced singers by audition only. The curriculum emphasizes sight reading, music theory, music history and vocal performance skills using a wide variety of musical styles but focusing heavily on Renaissance and Chamber music. Many out of school performances are required. Students receive honors credit for this class. Limited to 16-18 singers. Position available for student accompanist.

AP Theory and Harmony - 223535: Full year - 1 credit: 11th, 12th

AP music theory is a college preparatory class designed for the student who plans to continue their musical education in college. This is an intense, fast moving class that includes fundamentals of music, part writing, composition, and aural skills. Teacher approval and completion of a music pre-test is required for admission to this class. Students who do not pass the pre-test may be required to complete summer reading and studies for admission.

**String Orchestra - 273530: Full year – 1 credit; 9th
283530: Full year – 1 credit; 10th, 11th, 12th**

String Orchestra is a performance group at Oak Ridge High School giving several performances throughout the year. The orchestra participates in festivals and competitions as a group as well as students playing individually in All-State and festival orchestras. Prior playing experience is required.

String Orchestra, Honors - 293530: Full year – 1 credit; 9th, 10th, 11th, 12th

Orchestra Honors is a music performance class that includes all the requirements of regular orchestra. In addition, students must audition for a concert clinic such as All State East or participate in another director approved non-audition concert clinic. Honors orchestra students are expected to maintain the highest standards of musicianship and citizenship

Fusion Music- 253530: Full year—1 credit, 9th, 10th, 11th, 12th

Fusion Music is a performance group at Oak Ridge High School with a focus in non-classical genres. Jazz, Bluegrass, and Fiddle music are emphasized and students are introduced to improvising and composition techniques. Course is open to violin, viola, cello, bass, guitar, banjo, and mandolin students. Prior playing experience is required.

SCIENCE

The goal of the Science Department is to provide a variety of courses that will fit the needs and interests of all Oak Ridge students. The Accelerated Program allows the student to take AP courses and tests to earn college credit while still in high school. The General Program will prepare students for admission to a university or technical school or to graduate from high school. Tennessee colleges and universities require a minimum of three lab sciences and many out of state colleges and universities require four science credits. Students must complete three years of science for graduation. These three science credits must be biology, chemistry and/or physics, and a third science. Students will start as freshmen in either Biology, Honors, Biology CP or STEM. Once students have finished the coursework in column A, they will move to a course in column B. From there, students will move to a course in column C. If students wish to take an elective science senior year, students may choose another class from column C or move to column D.

Group A Courses	Group B Courses	Group C Courses	Group D Courses
<ul style="list-style-type: none"> • CP Biology • Hon. Biology • STEM & CP Biology 	<ul style="list-style-type: none"> • CP Chemistry • Hon. Chemistry 	<ul style="list-style-type: none"> • Gen. Physics • Astronomy • Hon. Genetics • Geology • CP Physics • Hon. Anatomy & Physiology • AP Environmental Science • AP Physics 1 • AP Physics 1&2 • AP Biology • AP Chemistry 	<ul style="list-style-type: none"> • AP Physics C: Mechanics • AP Physics C: Electromagnetism • Post-AP Experimental Scientific Research • Post-AP Organic Chemistry

Science Sequencing

Please see the course description for all pre- and co-requisites for all courses.

Freshman	Sophomore	Junior	Senior
Group A Course: STEM: Environmental Methods →	Group A Course: Biology CP →	Group B Courses: Gen Physics CP Chemistry Hon Chemistry	Group C Courses: Astronomy Hon. Genetics Geology Honors Physics Hon. Anatomy & Physiology AP Env. Science AP Physics 1 AP Physics 1&2 AP Biology AP Chemistry
Group A Course: CP Biology →	Group B Course: CP Chemistry → Hon Chemistry	Group C Courses: Gen Physics Hon. Genetics Geology Honors Physics Hon. Anatomy & Physiology Astronomy AP Env. Science AP Physics 1 AP Physics 1&2 → AP Biology AP Chemistry	Group C Courses: Hon. Genetics Geology Honors Physics Hon. A & P AP Env. Science AP Physics 1 AP Physics 1&2 AP Biology AP Chemistry Group D Courses: AP Physics C: Mechanics AP Physics C: Electromagnetism Post-AP Experimental Scientific Research Post-AP Organic Chemistry
Group A Course: Honors Biology →	Group B Course: CP Chemistry → Hon. Chemistry	Group C Courses: Gen Physics Hon. Genetics Geology Honors Physics Hon. Anatomy & Physiology AP Env. Science AP Physics 1 AP Physics 1&2 → AP Biology AP Chemistry Astronomy	Group C Courses: Hon. Genetics Geology Honors Physics Hon. A & P AP Env. Science AP Physics 1 AP Physics 1&2 AP Biology AP Chemistry Group D Courses: AP Physics C: Mechanics AP Physics C: Electromagnetism Post-AP Experimental Scientific Research Post-AP Organic Chemistry

Anatomy and Physiology Honors – 423251: Full year – 1 credit; 11th, 12th grades

Prerequisite: Chemistry

Anatomy and Physiology is the study of the body's structures and respective functions at the molecular, cellular, tissue, organ, systemic, and organism levels. Students explore the body systems through laboratory investigations, models, diagrams, and/or comparative studies of the anatomy of other organisms. The study of anatomy and physiology prepares students for a variety of pursuits such as health care, sports, and fitness careers, as well as for taking an active part in their own health and wellness.

A \$20 lab fee is requested.

Astronomy – 403295: Full year – 1 credit; 11th, 12th grades

Prerequisites: Chemistry or Physics; Geometry

Astronomy is a student-centered course determined to provide a basic understanding of the structure of the universe while allowing students to pursue their specific interests, including observational astronomy and authentic scientific research. Special attention is given to the introduction of tools for analyzing astronomical images, computer modeling, and simulations of the night sky. Advanced mathematical skills are not required; a passion for the night sky and asking questions is a must.

A \$10.00 lab fee is requested.

CP Biology – 403210: Full year – 1 credit; 9th, 10th grade or higher

Biology CP investigates the relationship between structure and function from molecules to organisms and systems, the interdependence and interactions of biotic and abiotic components of the environment, and mechanisms that maintain continuity and lead to changes in populations over time. There is a major emphasis on lab work, graphing and analysis skills. Embedded standards for Inquiry, Technology & Engineering, and Mathematics are taught in the context of the content standards for Cells, Interdependence, Flow of Matter and Energy, Heredity, and Biodiversity and Change.

A \$10 lab fee is requested.

Honors Biology – 413210: Full year – 1 credit; 9th or 10th grade

Co-requisite: Algebra 1 or higher

Biology Honors is a laboratory science course that investigates the relationship between the structure and function of molecules, organisms, and systems. The course also deals with the interdependence and interactions of biotic and abiotic components of the environment, and the mechanisms that maintain continuity that lead to changes in populations over time. Students explore biological concepts through inquiry approach. Standards for Inquiry, Technology & Engineering, and Mathematics are taught in the context of the content standards for Cells, Interdependence, Flow of Matter and Energy, Heredity, and Biodiversity and Change. Students enrolling in this course should have strong academic standing and possess good study and homework completion habits, as well as the ability to work independently.

A \$10 lab fee is requested.

AP Biology – 423217: Full year – 1 credit; 11th, 12th grades

Prerequisite: Chemistry (with a grade of B or higher)

This course is designed to be the equivalent of a two semester introductory college course in Biology. The course is organized around the underlying four big ideas which encompass the core scientific principle theories and processes governing living and biological systems. The four big ideas are: Evolution, Cellular processes (energy transfer), Genetics (information transfer), and Interactions. The course will prepare students for the AP Biology exam.

A lab fee of \$20 is requested.

CP Chemistry – 403221: Full year – 1 credit; 10th, 11th, 12th grades

Prerequisite: Biology (with grade of at least B in General Biology or course credit in Honors Biology)
Co-requisite: Geometry or higher

This course is intended for students needing a general descriptive knowledge of Chemistry and where the mathematical requirements are limited to an Algebra 1 background. General chemical principles are emphasized and practical application will be taught through laboratory experiences.

A lab fee of \$10 is requested.

Honors Chemistry – 413221: Full year – 1 credit; 10th, 11th, 12th grades

Prerequisite: Biology (with grade of A in General Biology or course credit in Honors Biology)
Co-requisite: Honors Geometry or higher.

This course provides a survey of chemistry, including a rigorous study of atomic and molecular structure leading to a basic understanding of the nature of and changes in matter. This course is centered on laboratory studies and the application of chemical principles. Theory is emphasized.

A lab fee of \$10 is requested.

AP Chemistry – 423225: Full year - 1 credit; 11th, 12th grades

Prerequisite: Chemistry

This course is intended for strong science students who wish to complete the equivalent of a first year college course in chemistry. A College General Chemistry textbook will be used. The course will prepare the student for Advanced Placement Examination.

A lab fee of \$30 is requested.

AP Environmental Science – 423236: Full year – 1 credit; 11th, 12th grades

Prerequisite: Chemistry

This course is designed to be the equivalent of a one semester, introductory college course in Environmental Science. This will be an interdisciplinary course and will draw from a wide variety of topics from different areas of study – biology, geology, ecology, chemistry, geography, and environmental studies. The goal of this course is to provide students with the scientific principles, concepts, and methodologies to understand the relationships of the natural world. It will allow them to identify and analyze environmental problems which could be both natural and man-made and to evaluate the risks associated with these problems. They will also examine alternative solutions for resolving or preventing them. The course will prepare the student for the AP Environmental Science Exam.

A lab fee of \$20 is requested.

Experimental Scientific Research – 413295: Full year - 1 credit; 11th, 12th grades

Prerequisites: AP Science Course (with a grade of B or higher)
Co-requisites: Calculus AB, Calculus BC, or Statistics

ESR is designed to teach the principles of performing and presenting scientific research in the life sciences. Students will engage in research projects during the summer and continue to work the following academic year through May. Students will design experiments, collect data, analyze data, and present their findings both orally and in written form. Students must complete an application and interview prior to enrollment. An approved summer project with a minimum of twenty documented hours must be completed prior to the start of the school year.

General Physics – 423231: Full year – 1 credit; 11th, 12th grades

Prerequisite: Biology.
Co-requisite: Algebra II

General Physics is an introductory survey course of the three major branches of physics: mechanics, waves, and electromagnetism. The course is intended to help all students meet the state graduation requirement for a physics or chemistry course. General physics will introduce or reinforce mathematical modeling and science processing skills such as: line of best fit, graphical calculus (determining slope and area from a graph), and computer-based time analysis of video. An emphasis on real world applications, such as analysis of traffic intersections, is a feature of the course.

A lab fee of \$10 is requested

Honors Physics - 433231; Full year-1 credit; 11th, 12th grades

Prerequisite: Chemistry (with a grade of B or higher)

Co-requisite: Algebra II

Honors Physics is an college preparatory level introduction to basic Physics concepts including mechanics, forces, vectors, two dimensional motion, momentum, energy, work, power and machines, thermodynamics, waves, light, optics, electricity, magnetism, nuclear and quantum physics. Mathematics including algebra, systems of equations, graphing and basic trigonometry are required to investigate these topics on this level. Laboratory, reference, research and design skills will also be emphasized. Students who are successful in this course are encouraged to take AP Physics 1 and 2 in following years.

A lab fee of \$10 is requested.

AP Physics 1 – 413231: Full year – 1 credit; 11th, 12th grades

Prerequisite: Chemistry Honors, AGATE or Algebra II (with a grade of B or higher)

AP Physics is the equivalent to a first-semester college course in algebra-based physics. Students who take this course are prepared for the AP Physics 1 exam. The course covers Newtonian mechanics (motion, force, momentum, circular motion and angular momentum); work, energy, and power; and mechanical waves and sound. It will also introduce electric circuits. All course attendance requirements will be completed within regular class time. This course does not cover all of the topics that are expanded upon in AP Physics C and is not considered a good prerequisite for AP Physics C.

A lab fee of \$20 is requested.

AP Physics 1 & 2 – 423233: Physics 1 Semester - 1 credit: 11th, 12th grades 433233: Physics 2 Semester - 1 credit:

Prerequisite: Algebra II Trigonometry

Co-requisite: Pre-Calculus

AP Physics 1-2 studies the College Board physics topics. Students who take this course are prepared for the AP Physics 1 and AP Physics 2 exams. AP Physics 1-2 is the most comprehensive physics curriculum taught at Oak Ridge High School. It is the recommended prerequisite course prior to taking the calculus based AP Physics C. Because of the compact nature of this course, additional class periods will be required.

A \$20 laboratory fee is requested.

AP Physics C - 423234: Mechanics – Semester – 1 credit; 11th, 12th grades 433234: Electromagnetism - Semester – 1 credit

Prerequisite: AP Physics 1 & 2

Co-requisite: Calculus AB or BC

Physics C is a calculus-based course designed primarily for students who wish to pursue studies in science or engineering in college. The course will prepare students for the Physics C advanced placement exams. The course focuses on the college equivalent of one semester mechanics and one semester electricity and magnetism.

A \$20 lab fee is requested.

STEM – 413260: Full year – 1 credit; 9th grade only

STEM is designed for students to explore the basic concepts of physical and life sciences, with an emphasis on reading, writing, math skills, and preparing students to take the ACT. Students will learn to conduct scientific investigations, apply the engineering design process, think scientifically, and use scientific tools and technologies. Students will also develop problem solving skills and learn to communicate scientific information and processes.

Honors Genetics – 433251: One semester - .5 credit; 11th, 12th grades

Prerequisites: Chemistry (with a grade of B or higher)

This course covers principles of prokaryotic and eukaryotic cell genetics. Emphasis is placed on the molecular basis of heredity, chromosome structure, patterns of Mendelian and non-Mendelian inheritance, evolution, and biotechnological applications. Upon completion, students should be able to recognize and describe genetic phenomena and demonstrate knowledge of important genetic principles.

A \$10.00 lab fee is requested.

Dual Enrollment Geology - 403205; Full year - 1 credit; 11th, 12th grades

Prerequisites: Physics or chemistry

This geology course will focus on the processes that shape the earth and the rocks that make up its composition. The processes covered in this course are plate tectonics, volcanism, earthquakes, weathering/erosion, and fossil formation. Students will also learn about how igneous, metamorphic, and sedimentary rocks are formed and identify those rocks and their common minerals in hand sample. Dual Enrollment offered through RSCC as Geology 1040 and UTK transfer as Geology 101.

A \$10.00 lab fee is requested.

Post-AP Organic Chemistry - 433225; Full year- 1 credit; 12th graders

Prerequisites: AP Chemistry with a 4 or 5 on AP exam

Organic Chemistry will cover chemistry topics at a college 300 level. The course will include the study of properties, preparations, reactions and spectroscopy of aliphatic and aromatic compounds. Reaction mechanisms and the relationship between structure and reactivity are examined. Additionally, carbanion condensations, heterocyclics, fats, carbohydrates, amino acids and proteins are covered.

Important information about this course

This course will be taught by an adjunct instructor and requires dual enrollment. Laboratory activities will be held at Roane State Community College due to the equipment required. Students will need to provide their own transportation. Laboratory activities will occur on Fridays for a minimum of three hours in order to meet the college laboratory time requirements.

SOCIAL STUDIES

The Social Studies Department has a variety of courses designed to meet the needs and interests of individual students. Social Studies classes are offered to accommodate students of different levels of ability and skills. All course placements must have a social studies teacher recommendation.

If you have any questions concerning Social Studies requirements, see your school counselor or social studies teacher.

Social Studies Sequencing

Freshman	Sophomore	Junior	Senior	
Civics: Government and Personal Finance	Open (Must take CP World History, AP MEH or AP Human Geography senior year) New Freshman will likely take Government sophomore year	→	AP or CP Economics, CP or AP Gov. and AP MEH	
	→	CP US History or CP US History and AP Government →	AP or CP Economics, CP or AP Gov. and CP World History	
			AP or CP Economics, CP or AP Gov. and AP Human Geography	
	→	CP US History →	AP or CP Economics	
			AP or CP Economics and Social Studies Elective	
	→	→ CP World History or AP US History → or AP US His and AP Gov. →	AP or CP Economics and CP or AP Gov.	
			AP or CP Economics and Social Studies Elective	
	→	AP Government (Must take CP World History, AP MEH or AP Human Geography senior year)	→	AP or CP Economics and AP MEH
			AP US History →	AP or CP Economics and CP World History
	→	Open (Must take World Geography senior year) →	→	AP or CP Economics and AP Human Geography
US History Wkshop →			World Geography and CP or Contemporary Economics	
→	World Geography →	→	CP or Contemporary Economics and Elective	
		US History Wkshop →	CP or Contemporary Economics	
Open (no social studies class this year)	World Geography →	US History Wkshop →	Contemporary or CP Economics, US Government and Personal Finance	
Social Studies requirements: World History/Geography/MEH/Human Geography, US History, US Government and Personal Finance (3 ½ credits)				

ADVANCED PLACEMENT: Advanced Placement is offered in United States History, Economics, Modern European History, Psychology, Human Geography and World History for students with the time and interest to pursue it. Advanced Placement students will follow an in-depth and accelerated course of study; therefore, advanced skills are essential. If they choose, at the end of the course AP students may take a College Board sponsored test. Depending on the score earned on the AP test and the policy of the college attended, students may receive credit for introductory courses at his or her college in addition to high school credit. Many students who qualify have taken advantage of these programs at Oak Ridge High School.

Students interested in AP United States History should register for course 723440; students interested in AP Modern European History should register for course 723441; students interested in AP Psychology should register for course 723447; students interested in AP Human Geography should register for course 703450; students interested in AP World History should register for Combined Studies History, course 723449; students interested in AP Economics should register for AP Microeconomics/Economics Theory (723443). AP Economics/Macroeconomics (723444) will prepare a student for a second test in AP Economics. With both Micro and Macroeconomics, acceptable scores on the AP Exams, and college approval, a student can earn six semester hours credit in Economics. The University of Tennessee, Knoxville requires both courses in order to receive Economics credit.

Civics – Government: 743407: One semester - .5 credit; 9th
Personal Finance: 743496: One semester - .5 credit; 9th

Civics is a team taught class in a large seminar setting. Two graduation requirements are earned: Government and Personal Finance.

The government content is designed primarily for freshmen to provide students with a practical study of the functions and workings of the United States Government. Students will examine important governmental

issues including: the rights and responsibilities of citizenship, the need for active citizen participation, immigration and naturalization, the roots of American democracy, the structure and function of the United States Constitution, and the workings of the legislative, executive, and judicial branches of government. There will also be an emphasis placed upon current events to ensure that students are familiar with important global and domestic issues.

The personal finance content is designed primarily for freshmen to provide students with a practical study of how individual choices directly influence occupational goals and future earnings potential. Real world topics covered will include income, money management, spending and credit, as well as saving and investing. Students will design personal and household budgets simulate use of checking and savings accounts, demonstrate knowledge of finance, debt, and credit management, and evaluate and understand insurance and taxes. There will also be an emphasis placed upon current events to ensure that students are familiar with important global and domestic economic issues

AP United States Government and Politics: 703445 and 723407 Full year - .5 AP U.S. Government State credit, .5 Civics elective; 10th, 11th, 12th

The Advanced Placement course in United States Government and Politics is a team-taught, year-long course designed to give students a critical perspective on politics and government. This course involves both the study of general concepts used to interpret U. S. politics and an examination of the various institutions, groups, beliefs, and ideas that make up the American political system. Students will develop understanding of the typical patterns of political processes and behavior and apply reasoning to assess the causes and consequences of political events. Students will examine, analyze, and interpret basic data relevant to U.S. government and politics. This class will meet the State graduation requirement for one-half credit in U.S. government and prepare the student for the AP examination in United States Government and Politics. Depending on the score received on the AP examination, students can receive college credits; therefore, the course is taught with college-level textbooks and rigor.

The course is for sophomore students who have completed Freshman English, Honors with a minimum grade of B or with a social studies recommendation. The course is also for Junior students enrolled in CP Junior English and CP US History or higher and Senior students enrolled in CP Senior English, or have a social studies recommendation.

Government: 743407: One semester - .5 credit; 9th, 10th, 11th, 12th

Government is designed to provide students with a practical study of the functions and workings of the United States Government. Students will examine important governmental issues including: the rights and responsibilities of citizenship, the need for active citizen participation, immigration and naturalization, the roots of American democracy, the structure and function of the United States Constitution, and the workings of the legislative, executive, and judicial branches of government. There will also be an emphasis placed upon current events to ensure that students are familiar with important global and domestic issues

Personal Finance: 743496: One semester - .5 credit; 9th, 10th, 11th, 12th

Personal Finance is designed to provide students with a practical study of how individual choices directly influence occupational goals and future earnings potential. Real world topics covered will include income, money management, spending and credit, as well as saving and investing. Students will design personal and household budgets simulate use of checking and savings accounts, demonstrate knowledge of finance, debt, and credit management, and evaluate and understand insurance and taxes. There will also be an emphasis placed upon current events to ensure that students are familiar with important global and domestic economic issues.

**Combined Studies AP World History – 723449: Full year - 1 credit; 10th
(Student must also enroll in Combined Studies Sophomore English Honors)**

The history component of Combined Studies is a team-taught Advanced Placement course for sophomores and students enrolled in the course must also take the English component. An enriched AP World History curriculum is correlated to the world literature presented in the English component to establish an understanding of world cultures that is a necessary foundation for success in future AP courses in both departments. Critical thinking skills and analytical strategies are also emphasized to improve content retention and to enhance writing skills. Because both the history and the English components of the course prepare students for the AP World History exam, the AP grading scale is used

in both courses throughout the year. Combined Studies students should possess above-average reading, writing, and study skills and can potentially earn college credit by taking the AP World History exam.

Contemporary Economics Workshop- 723431: One semester- .5 credit; 11th, 12th

Students study how people, businesses, and governments choose to use resources & how values and beliefs influence economic decisions in different societies. Globalization of the economy, world demographics, environmental concerns, & the impact of technological changes and international competition will be examined. Learners in this course will understand the knowledge, skills, and attitudes necessary to function effectively in a technologically expanding global economy.

Students will examine and analyze economic concepts such as basic needs versus wants, using versus saving money, and policy-making versus decision-making. The learners will also understand the economic roles and responsibilities of citizens living in a democratic society. Economic consequences of governmental and Federal Reserve policies will be analyzed.

The students will also understand the elements of personal and fiscal responsibility. They will identify values and standards associated economically on his/her lifestyle.

This class is designed for students who need an individualized program in Economics.

CP Economics - 713431: One semester - .5 credit; 11th, 12th

This course is a study of the market economy and the free enterprise system. Emphasis will be placed on the role of government and the individual in the system. Economic systems, supply and demand, business cycles, money and banking, labor, government intervention in the economy, and international economics are some of the topics that are covered. Lecture, small group work, stock market simulations, and various projects will be used to master the United States economic system.

AP Economics Theory: Microeconomics - 723443: One semester - .5 credit; 11th, 12th

Microeconomics AP allows the student an opportunity to experience a college-level course and earn college credit while fulfilling the graduation requirement for economics instruction at ORHS. Micro examines the basic concepts of economics, supply and demand issues, marginal benefit analysis, and market structures. The student will build a stock market portfolio, create a business, and apply many microeconomic concepts into current economic conditions.

This class will meet the State graduation requirement for economics and prepare the student for the Micro section of the AP Economics Exam. This course is designed for the accelerated student whose reading, writing, and thinking skills are well developed.

AP Economics Theory: Macroeconomics - 723444: One semester - .5 credit; 11th, 12th

Macroeconomics AP is for the student who is interested in the political system, environmental concerns, the financial power of our government and the Federal Reserve System. Students will examine the role of government, the Federal Reserve System, the Stock Market, global economics, and the decisions of the all-important consumer. Current economic events and economic indicators are analyzed and applied to master the theory of Macroeconomics.

This class will meet the State graduation requirement for economics and prepare the student for the Micro section of the AP Economics Exam. This course is designed for the accelerated student whose reading, writing, and thinking skills are well developed.

AP European History - 723441: Full year - 1 credit; 12th

This course challenges students with an examination of European developments in modern times. Changes from 1450 to the present will be examined in significant detail. Cultural developments like the Renaissance, political changes like the rise of Fascist states, and economic advances like the Industrial Revolution are all treated in some detail. Some common themes, such as women's issues, are treated throughout the course. A substantial amount of reading and writing is required to develop the basic techniques of the historian and the scholar. Students are provided with the opportunity to pursue individual interests in social, economic, intellectual, and political developments and are encouraged to develop analytical and independent thinking skills. Advanced Placement exam preparation in European History is included.

AP Human Geography –703450: Full Year – 1 credit; 12th

AP Human Geography is a year-long course designed for students who are enrolled in Senior English classes. This college level introductory course will study patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. This course uses spatial concepts and analysis of landscapes to understand human geography and the consequences on our environment.

The course topics include: Geography, Population, Cultural Patterns and Processes, Political Organization of Space, Agriculture and Rural Land Use, Industrialization and Economic Development, Cities and Urban Land Use. Students taking this course will be prepared to take the AP Exam and should have above average reading level. They may earn 3 hours of college credit by successfully completing the AP Exam. This course will satisfy the graduation requirement for World History or World Geography.

Psychology - 713433: One semester - .5 credit; 10th, 11th, 12th

This general psychology course will introduce students to the scientific study of human and animal behavior. Units of study include human development during the life span, biological basis of behavior including the brain, the learning process, intelligence and creativity, personality theories, behavior patterns, symptoms, causes and treatments of emotional disorders, sensation and perception, and the social influences on our behavior. Average ability is required.

AP Psychology - 723447: Full year - 1 credit; 11th, 12th

The Advanced Placement course in Psychology is designed to allow students the opportunity to earn college credit while still in high school. The course will introduce the student to the systematic and scientific study of behavior and the mental processes of human beings and other animals. The students will be exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within Psychology. Topics to be studied include the history of psychology, biological bases of behavior, sensation and perception, states of consciousness, learning, motivation and emotion, developmental psychology, personality, testing and individual differences, abnormal psychology and treatment of psychological disorders. The students will also learn about the methods and approaches psychologists use in their science and practice. This course is open to students who are able to work independently and have above-average reading skills. Depending on the score earned on the AP examination a student can earn college credits; therefore, he or she should be prepared to work on a college level. Please see the Advanced Placement entry at the beginning of the Social Studies section of the Proposed Program of Studies.

Sociology - 713432: One semester - .5 credit; 10th, 11th, 12th

The major goal of this course is to teach students to think like a sociologist by approaching sociology as a science. The student will learn concepts, principles, theories and methods used by sociologists in the examination of social life. The tools of sociological inquiry are then applied to the study of contemporary social issues such as cultural diversity, conformity and adaptation, social institutions and their roles in society, personality development, problems of adolescence, deviance and social control, poverty in America, race relations, sex roles, social change and collective behavior. Students will learn to develop a sociological imagination which will enable them to perceive how people's lives are shaped by their social environment and how the social environment is in turn shaped by people. It is hoped that students will learn to understand and appreciate social diversity and become more open to new ideas and philosophies.

AP United States History - 723440: Full year - 1 credit; 11th

U.S. History Advanced Placement is a course designed to give students different options to satisfy the U.S. History requirement.

Option 1: Students may take this course for high school credit only. For their efforts they will earn weighted credit.

Option 2: In addition to high school credit, students may also take this course for Advanced Placement. Students are prepared to take the AP Examination given in May and the AP U.S. History course outline will be followed. Please see the Advanced Placement entry at the beginning of the Social Studies section of the Proposed Program of Studies.

Most students in the course have a 3.0 or better grade point average at the end of their sophomore year. A college textbook will be used and students are required to complete historical outlines, research projects, and supplementary readings. Strong reading and writing skills are required, and for their successful efforts students will receive weighted credit.

United States History Workshop - 703405: Full year - 1 credit; 11th

This course is designed to give students a general understanding of American History. Emphasis will be on individual learning with the textbook as the main source. The course incorporates geography to recognize the impact of U.S. development on people, places, and historical events. Additional media, special student projects, and supplemental reading will be used at the discretion of the teacher. This class is not a university preparatory course.

Students are required to take the Tennessee End-of-Course Exam with the exam score figured as a part of the student's final grade in the course.

CP United States History - 713405: Full year - 1 credit; 11th

This course quickly surveys the Age of Discovery, colonization, colonial, and Revolutionary periods. It continues with major emphasis given to the study of America from the Constitution to the present. Background of the nation's current problems and values will be included. The course incorporates geography to recognize the impact of U.S. development on people, places, and historical events. Use of source material in addition to the textbook will be at the discretion of the teacher.

Students are required to take the Tennessee End-of-Course Exam with the exam score figured as a part of the student's final grade in the course.

World Geography - 713410: Full year - 1 credit; 10th, 12th

This course is a study of the location, description, and interactions of the earth's features--its people, landforms, climate, and natural resources. Through geographic study, students will answer the questions of where something is and the effects of location, environment, and population on the lives of people in any particular region. By examining the fundamental themes of geography, students will apply geography to interpret the past and explain the present. Special student projects will be featured. Students who register for this course should have at least average reading and writing abilities. Students considering World Geography should be aware that some out-of-state colleges require a World History credit for admissions. World Geography will not meet a World History requirement. Students should be enrolled in English Workshop or English 4.

CP World History - 713401: Full year - 1 credit; 10th, 11th, 12th

This is a college preparatory course designed to give the student an understanding of the development of civilizations in Asia, Africa, Europe, and the Americas. Content includes selected histories of these areas from earliest times to the present. In addition, political, economic, and cultural interdependence will be emphasized, along with the study of art, architecture, philosophies, and major historical concepts. The course will incorporate geography to enable the student to see, understand, and appreciate the web of relationships between people, places, and environments. Students who register for this course should have at least average reading, writing, and thinking abilities.

YLDCIP**Youth Leadership Development, Community Involvement Program (YLDCIP) – 703499: 1 credit; 713499: .5 credit; 11th, 12th**

Students must meet with the YLDCIP instructor prior to registering for this course.

Youth Leadership Development community Involvement Program (YLDCIP) is a unique community-based learning and service program that utilizes the community as the classroom. The purpose of YLDCIP is to develop student civic awareness, responsibility and leadership through involvement in projects beneficial to the community. The program is designed to provide career orientation and exploration experiences for students through community volunteer work, volunteer services and volunteer research.

Students will have the opportunity to choose an area of interest and, under the guidance of a teacher, design a program to suit his or her needs. The student will select a community activity or project, develop project goals and objectives, identify project strategies, and establish a project evaluation design. A project report must be written which includes goal and objective accomplishment data.

Some sample projects include: biological research, law experience (with specific attorney or agencies providing legal services), junior engineering positions, special education, elementary education, social

services, and sports marketing. Length of project will vary with project selected.

WELLNESS

Lifetime Wellness is geared toward developing a positive lifestyle management process for a more productive and higher quality of life. For students entering the ninth grade: one-half credit of Wellness A, one-half credit of Wellness B and an additional one-half credit of either Wellness C, Advanced Sports, Athletic Conditioning or an approved in lieu of activity are required for graduation.

Lifetime Wellness A - 903303: One semester, - .5 credit 9th, 10th

Wellness A focuses on emotional and mental health, nutrition and weight control, drug misuse and abuse, integrated sex education and preventative diseases. Wellness A is a one semester course which meets during regular class periods. It is highly recommended that Wellness A be taken no later than a student's sophomore year in order to avoid scheduling conflicts during their junior and senior years.

Lifetime Wellness B -923303: One semester, - .5 credit 9th, 10th, 11th, 12th

Wellness B focuses on the physical conditioning of the body as it relates to the whole person and may be taken any time before graduation. Activity through team sports and individual/dual sports makes up the majority of this class. Wellness B offers a less competitive atmosphere.

Lifetime Wellness C – Cardio & Nutrition – 983303: Full year, - .5 credit; 9th, 10th, 11th, 12th

Wellness C – Cardio & Nutrition is primarily a walking class. A minimal amount of classroom instruction may be included. The class will be offered during half of the lunch period. Students will participate for one half period for the entire school year to earn their .5 credit for Wellness C.

Advanced Sports - 913301: One semester; - .5 credit; 9th, 10th, 11th, 12th

Prerequisite: Instructor Approval/Signature

Advanced Sports can be taken for one semester for one half (.5) credit or for the full year for one (1) credit. Course content will focus on adult leisure-time activities that can hopefully be carried over into the student's adult life. Advanced Sports is designed for athletic students and offers a competitive and tournament driven atmosphere. Advanced Sports can count for the additional one half credit of activity required for graduation but cannot be taken in lieu of Wellness B.

Athletic Conditioning - 913302: One semester - .5 credit; 9th, 10th, 11th, 12th

Prerequisite: Wellness B and/or Instructor Approval/Signature

The main emphasis of this class will be on strength development through resistance training. Students will work out in a structured and controlled atmosphere designed to improve their physical condition for athletics. Aerobic activities will be supplemented in order to tax the cardio-vascular system. This course may be taken for two semesters. Athletic Conditioning can count for the additional one half credit of activity required for graduation but cannot be taken in lieu of Wellness B.

Sport Wellness C and Marching Band Wellness C - .5 credit

Participation in the ORHS Marching Band and/or ORHS athletic teams may count in lieu of a student's Wellness C requirement. Students must complete the proper paperwork through the Counseling Department during the school year. Students must participate for the entire season in order to receive credit for participation. Students who fail to meet the minimal requirements, including quitting or being dismissed from the team before the season's completion will not earn a credit.

WORLD LANGUAGES

Knowing another language can . . .

- enhance your employability
- enrich your understanding of the world and its peoples
- contribute to your enjoyment of travel abroad and in the U.S.
- improve English and academic performance in general
- earn free or low-cost college credit
- improve performance on the ACT and the SAT

How many language classes are required in high school?

- All students will be required to earn 2 credits in the same language. Three or four years if you are planning to attend a selective university.
- Given the strong correlation between language study and standardized test scores, it is highly recommended that students continue their language study through the junior year.
- Take all levels offered (7th-12th grade) if you want to be proficient enough to earn college credit by taking and passing the Advanced Placement Language Exams (French, German, Spanish).
- The greater your proficiency, the better you will score on university placement exams. You may be able to test out of college language requirements, earn college credit, and/or enter advanced-level courses.
- The greater your proficiency, the more likely you are to minor in language or earn a double major. Our graduates often double major in language and political science, international studies, business, education, or engineering.
- Proficiency in a world language is one of the most desired skills by employers and gives any student an advantage in the job market.

How to succeed in language study . . .

- Demonstrate good study habits (memorize, listen to the teacher in class, ask questions, take notes, participate in speaking and writing activities, do homework, study for tests). Homework for Levels 1 and 2 is usually 20 minutes per day. Upper levels have 30-45 minutes of homework each day.
- Attend class regularly. You miss essential concepts, as well as listening and speaking practice when you are absent.
- Earn at least a C in order to progress to the next level. To progress into an Honors level class, a 90% is required. Placement is determined by teacher recommendation, which is based principally on grades earned but may include other factors such as exit exams, attendance, and study habits.

When should I take language classes?

- Good language students with consistent study skills should begin at the middle school so they can take advantage of all the levels offered at Oak Ridge High School.
- Freshmen who took French or Spanish in middle school for high school credit should take French 2 Honors or Spanish 2 Honors their freshman year. It is HIGHLY recommended that they continue on to French 3 Honors or Spanish 3/3 Honors their Sophomore year.
- Freshmen recommended by their middle school language teachers, who did not receive high school credit for their language study, should take French 2 or 2 Honors or Spanish 2 or 2 Honors freshman year. They will be required to complete French 3 Honors or Spanish 3/3 Honors to fulfill the graduation requirement.
- Middle school language teachers may recommend that a student repeat French 1 or Spanish 1 freshman year. These students will only have to complete French 2 or Spanish 2 to fulfill the graduation requirement.

- Freshmen can take CP German 1. The high school offers CP German 1 through AP German Language.
- Freshmen with no prior language experience should begin their language study if they are enrolled in Freshman English and Algebra 1 (or higher), and they have a composite score of 13 (or higher) on the EXPLORE test.
- Freshmen who might find the adjustment to high school difficult should begin language study in the sophomore year. This will allow them to acclimate themselves to the high school before adding World Language. However, it is not recommended that World Language be delayed until the junior year.
- The years of study should be consecutive.

World Language Sequencing

Freshman	Sophomore	Junior	Senior
French 2 Honors →	French 3 Honors →	French 4 Honors →	AP French
CP French 2 →	CP French 3 →	→	Stop
		Stop	
CP French 1 →	French 2 Honors →	French 3 Honors →	French 4 Honors
		→	Stop
		Stop	
	CP French 2 →	CP French 3 →	French 4 Honors
		→	Stop
		Stop	
Open (No world language this year) →	CP French 1 →	CP French 2 →	CP French 3
		→	French 3 Honors
		→	Stop
	Open →	CP French 1 →	CP French 2
CP German 1 →	CP German 2 or German 2 Honors →	German 3 Honors →	AP German
		→	Stop
		Stop	
Open (No world language this year) →	CP German 1 →	CP German 2 or German 2 Honors →	German 3 Honors
		→	Stop
	Open →	CP German 1 →	CP German 2
Spanish 2 Honors →	Spanish 3 Honors →	Spanish 4 Honors →	AP Spanish
		→	Stop
		Stop	
CP Spanish 2 →			
	CP Spanish 3 →	Stop	
CP Spanish 1	Spanish 2 Honors	Spanish 3 Honors	Spanish 4 Honors

	→	→	→	
		→	Stop	
	CP Spanish 2	→	CP Spanish 3 →	Spanish 4 Hon.
			→	Stop
		Stop		
Open (No world language this year)	→	CP Spanish 1 →	Spanish 2 Honors →	Spanish 3 Hon.
			CP Spanish 2 →	CP Spanish 3
			→	Stop

FRENCH

CP French 1 - 523041: Full year - 1 credit; 9th, 10th, 11th, 12th

French 1 includes elements from French A and French B taught at the middle school level. French 1 uses various techniques to develop a basic understanding of the language. Emphasis is placed on conversation patterns, vocabulary, reading skill, grammatical structures and pronunciation. The students learn about culture through discussions, readings, videos and classroom experiences. A grade below a C will carry a recommendation for French 1 again rather than French 2.

CP French 2 - 503042: Full year - 1 credit; 9th, 10th, 11th, 12th

Prerequisite: Successful completion of previous course with a C average or better and/or teacher recommendation.

The emphasis in French 2 is on developing speaking, reading and writing skills. An analysis of French grammar is presented. Much culture is presented through varied materials. Speaking skills are maintained. Students enrolled in French 2 may progress to French 3 or French 3 Honors with teacher recommendation.

French 2, Honors: 523042: Full year – 1 credit; 9th, 10th, 11th, 12th

Prerequisite: Successful completion of previous course with a 90% average or better, and/or teacher recommendation.

French 2 Honors will include all elements of French 2. In addition, it is intended to provide students with a language learning experience that will enable them to communicate in a variety of contexts. Students will develop and apply their speaking and writing skills in order to express opinions, convey and respond to messages and questions, and apply knowledge of the cultures of countries where French is spoken. Cultural readings and current events will be used to enhance reading skills. In addition to the online textbook, students will make use of the language lab and other appropriate technology. Students in French 2 Honors will progress to French 3 Honors.

CP French 3 - 503043: Full year - 1 credit; 10th, 11th, 12th

Prerequisite: Successful completion of previous course with a C average or better and/or teacher recommendation.

A brief overview of French history and short literary selections continue the development of language skills; oral and written expression and comprehension are still of central importance. A thorough analysis of French grammar is presented. Classes also discuss current events and prepare conversations on common topics of interest. Students are expected to try to understand and to use French in the classroom.

French 3, Honors – 513043: Full year - 1 credit; 10th, 11th, 12th

Prerequisite: Successful completion of previous course with a 90% average or better, and/or teacher recommendation.

French 3 Honors will include all elements of French 3. In addition, students will develop considerable knowledge of grammar, vocabulary, spelling and pronunciation. Students will be able to understand most of the main ideas and details of materials read, and understand the spoken language. They will demonstrate critical and creative thinking skills. Students will apply inquiry skills such as formulating questions, analyzing and interpreting information and forming conclusions. They will communicate ideas and information with considerable clarity and will communicate with a variety of audiences and purposes, and in a variety of ways. Students will use required language structures and vocabulary and make connections between the language and culture, arts, history and literature. In addition to the online textbook, students will make use of the language lab and other appropriate technology.

Dual Enrollment French 4 - 513044: Full year - 1 credit; 11th, 12th

Prerequisite: Successful completion of previous course with a 90% average or better, and/or teacher recommendation.

The fourth year of French includes units on nineteenth, twentieth, and twenty-first century history, culture, and literature of the French speaking world. Dual Enrollment is for Beginning French 1 and 2. Students learn about French contributions to modern art, music, and literature through individual and group readings, presentations and films. Class work also includes listening to and preparing recordings as well as written compositions and other oral assignments. Students refine grammar concepts, expand vocabulary knowledge, and are introduced to advanced placement exercises. Students are expected to make an earnest effort to communicate in French. This course is the first of a two-year preparation for the Advanced Placement Examination in French Language and Culture.

**AP French Language and Culture - 523045: Full year - 1 credit; 11th, 12th
Dual Enrollment Intermediate French 1 and 2**

Prerequisite: Successful completion of previous courses with a 90% average and/or teacher recommendation.

The AP French course is taught completely in French and strives to promote both fluency and accuracy in the target language. This course engages students in an exploration of culture in both contemporary and historical contexts. Students' awareness and appreciation of Francophone cultural products, practices, and perspectives are developed. Throughout the year, students will present oral presentations, record conversations, write emails and persuasive essays, as well as work together on group projects. Students are encouraged to take the AP exam at the end of the year. In order to help ensure success, the purchase of the AP workbook is highly recommended.

GERMAN

CP German 1 - 503051: Full year - 1 credit; 9th, 10th, 11th, 12th

CP German 1 is a course for active learning, in which the student learns vocabulary and structures, and immediately uses the knowledge to express ideas and opinions. The discovery method is used to present grammar and structures, and workbooks offer creative activities as well as ample practice. A complete lab program is an integral feature of the Langenscheidt materials, and music, games and puzzles enhance the process of language acquisition.

CP German 2 - 513052: Full year - 1 credit; 10th, 11th, 12th

CP German 2 continues the active learning process, and by the end of this year, the motivated learner is able to communicate proficiently in a German-speaking country. Small-group work is frequent, and students have workbooks and the lab program to reinforce learning.

CP German 2 Honors - 523052: Full year - 1 credit; 10th, 11th, 12th

German 2 Honors entails the same German 2 curriculum with an independent study and final project aspect. This course continues the active learning process, and by the end of this year, the motivated learner is able to communicate proficiently in a German-speaking country. Small-group work is frequent, and students have workbooks and the lab program to reinforce learning. The independent study will be selecting and reading a

novel in the first two terms of the school year with a final presentation at the end of the first semester. In the second semester, students will do a final project highlighting an assigned grammar topic they learned either in German 1 or 2, and they will teach it to a Level 1 German class.

German 3 Honors- 513053: Full year - 1 credit; 11th, 12th

German 3 Honors continues an integrated program of print, film, audio, and technology to take the student to German language proficiency. As a terminal high school course, it prepares the student for success on any college-level German language placement test. Students are expected to be self-motivated and ready to explore the history and culture of the German-speaking nations. Participation in the National German Honor Society is encouraged, and all students are required to take the Level 3 AATG Test. For the student continuing to AP German Language and Culture, German 3 Honors provides the basis for a year of writing, reading literature, and creating student-driven projects that are required.

AP German Language 4 and Culture - 523055: Full year - 1 credit; 11th, 12th

Prerequisite: Successful completion of previous course and teacher recommendation.

This course brings the student to a listening proficiency level of ability to understand spoken language at natural speed on familiar topics. The student will speak the language effectively enough to be understood by a sympathetic native speaker, and will read material with minimal reference to the dictionary. The student will express both personal and impersonal ideas through writing and will further knowledge of the culture and history of the German-speaking countries. Students who continue AP German 4 Language will take the class with an emphasis on the reading of literature, writing well enough to be understood by a native speaker, and discussion in the target language of a wide variety of topics. Grammar and vocabulary review are intrinsic, and individual and group projects are regular features. With this course, the student can prepare for the AP exam, and additional resources are available to those who will take the exam. Purchase of a workbook may be required.

SPANISH

CP Spanish 1 - 503021: Full year - 1 credit; 9th, 10th, 11th, 12th

Spanish I is an entry-level course designed for students with no previous Spanish course or for students with limited proficiency in prior elementary, middle school, or Spanish 1 courses. The main focus of the course is on the development of communication proficiency in the target language. Students will demonstrate proficiency by using the three modes of communication: Interpersonal (speaking, listening, and writing), Presentational (speaking and writing), and Interpretative (reading and listening) and will gradually build a foundation in language structure. Grammatical concepts and vocabulary will be taught in context from within six cultural themes: Family and Communities, Science and Technology, World Challenges, Beauty and Aesthetics, Personal and Public Identities, and Contemporary Life. These cultural themes will be explored through authentic sources, such as news articles, video clips, music, literature, etc. and will be supplemented by the textbook. There is a great emphasis in the use of technology as it provides a venue for students to enhance their speaking and listening comprehension.

CP Spanish 2 - 503022: Full year - 1 credit; 9th, 10th, 11th, 12th

Prerequisite: Successful completion of previous course with a C average or better and/or teacher recommendation.

This course is designed to improve the student's proficiency level in the three modes of communication: Interpersonal (speaking, listening, and writing), Presentational (speaking and writing), and Interpretative (reading and listening). In this course, students will continue to develop an understanding and appreciation of other cultures as they learn the target language. The main focus of the course is on the development of communication proficiency in the target language. Grammatical concepts and vocabulary will be taught in context from within six cultural themes: Family and Communities, Science and Technology, World Challenges, Beauty and Aesthetics, Personal and Public Identities, and Contemporary Life. These cultural themes will be explored through authentic sources, such as news articles, video clips, music, literature, etc. and will be supplemented by the textbook. There is a great emphasis in the use of technology as it provides a venue for students to enhance their speaking and listening comprehension.

Spanish 2, Honors - 523022: Full year - 1 credit; 9th, 10th, 11th, 12th

Prerequisite: Successful completion of previous course with a 90% average or better, and/or teacher recommendation.

This course is designed for students who plan to pursue advanced levels of Spanish studies. Students who have outstanding achievement in Spanish 1 are encouraged to enroll in this course. This class includes all the elements found in CP Spanish 2 while emphasizing critical thinking and independent research. The main focus of the course is on the development of an increased degree of proficiency in the target language. Students will demonstrate proficiency by using the three modes of communication: Interpersonal (speaking, listening, and writing), Presentational (speaking and writing), and Interpretative (reading and listening) and will gradually build a foundation in language structure. Grammatical concepts and vocabulary will be taught in context from within six cultural themes: Family and Communities, Science and Technology, World Challenges, Beauty and Aesthetics, Personal and Public Identities, and Contemporary Life. These cultural themes will be explored through authentic sources, such as news articles, video clips, music, literature, etc. and will be supplemented by the textbook. There is a great emphasis in the use of technology as it provides a venue for students to enhance their speaking and listening comprehension.

CP Spanish 3 - 503023: Full year - 1 credit; 10th, 11th, 12th

Prerequisite: Successful completion of Spanish 2 or Spanish 2 Honors with a C average or better and/or teacher recommendation.

This course is designed to improve the student's proficiency level in the three modes of communication: Interpersonal (speaking, listening, and writing), Presentational (speaking and writing), and Interpretative (reading and listening). In this course, students will continue to develop an understanding and appreciation of other cultures as they learn the target language. The main focus of the course is on the development of communication proficiency in the target language. Grammatical concepts and vocabulary will be taught in context from within six cultural themes: Family and Communities, Science and Technology, World Challenges, Beauty and Aesthetics, Personal and Public Identities, and Contemporary Life. These cultural themes will be explored through authentic sources, such as news articles, video clips, music, literature, etc. and will be supplemented by the textbook. There is a great emphasis in the use of technology as it provides a venue for students to enhance their speaking and listening comprehension.

Spanish 3, Honors - 523023: Full year - 1 credit; 10th, 11th, 12th

Prerequisite: Successful completion of Spanish 2 or Spanish 2 Honors with a 90% average or better and/or teacher recommendation.

This course is designed for students who plan to pursue advanced levels of Spanish studies. Students who have outstanding achievement in Spanish 2 or Spanish 2 Honors are encouraged to enroll in this course. This class includes all the elements found in CP Spanish 3 while emphasizing critical thinking and independent research. The main focus of the course is on the development of an increased degree of proficiency in the target language. Students will demonstrate proficiency by using the three modes of communication: Interpersonal (speaking, listening, and writing), Presentational (speaking and writing), and Interpretative (reading and listening) and will gradually build a foundation in language structure. Grammatical concepts and vocabulary will be taught in context from within six cultural themes: Family and Communities, Science and Technology, World Challenges, Beauty and Aesthetics, Personal and Public Identities, and Contemporary Life. These cultural themes will be explored through authentic sources, such as news articles, video clips, music, literature, etc. and will be supplemented by the textbook. There is a great emphasis in the use of technology as it provides a venue for students to enhance their speaking and listening comprehension.

Dual Enrollment Spanish 4 - 513025: Full year - 1 credit; 11th, 12th

Prerequisite: Successful completion of previous course with a 90% or better and/or teacher recommendation.

This course is designed to encourage students to interact in a global community. Dual Enrollment is for Beginning Spanish 1 and 2. Communication is the emphasis along with vocabulary expansion within the six cultural themes: Family and Communities, Science and Technology, World Challenges, Beauty and Aesthetics, Personal and Public Identities, and Contemporary Life. Students will improve fluency and grammatical accuracy by using the three modes of communication: Interpersonal (speaking, listening, and writing), Presentational (speaking and writing), and Interpretative (reading and listening). Materials include authentic sources such as cultural and historical readings, short stories, poetry, music, art, websites, and films in order to maximize communication in real-life situations and gain cultural understanding. Classes are conducted entirely in Spanish and students are expected to speak only Spanish in class. In addition, students are also encouraged to seek opportunities to use the target language outside of the classroom.

**AP Spanish Language - 523025: Full year - 1 credit; 11th, 12th
Dual Enrollment Intermediate Spanish 1 and 2.**

Prerequisite: Successful completion of previous course with a 90% average or better and/or teacher recommendation.

This course is designed to prepare students to interact in a global community. Dual Enrollment is Intermediate Spanish 1 and 2. Communication is the emphasis along with vocabulary expansion within the six cultural themes: Family and Communities, Science and Technology, World Challenges, Beauty and Aesthetics, Personal and Public Identities, and Contemporary Life. Students will refine fluency and grammatical accuracy by using the three modes of communication: Interpersonal (speaking, listening, and writing), Presentational (speaking and writing), and Interpretative (reading and listening). Materials include authentic sources such as radio talk shows, news articles, emails, and music from Spanish-speaking countries in order to maximize communication in real-life situations and gain cultural understanding. Classes are conducted entirely in Spanish and students are expected to speak only Spanish in class. In addition, students are also encouraged to seek opportunities to use the target language outside of the classroom. In preparation for the AP Exam in Spanish Language and Culture, students will be taught specific test-taking strategies and will practice for the exam. Students will need to purchase a workbook.

HIGH SCHOOL COURSE PLAN

9 TH GRADE	Grade	CR	10 TH GRADE	Grade	CR	11 TH GRADE	Grade	CR	12 TH GRADE	Grade	CR
ENG			ENG			ENG			ENG		
MATH			MATH			MATH			MATH		
SCI			SCI			SCI					
						U.S. HIST					
LUNCH CLASS			LUNCH CLASS			LUNCH			LUNCH		
TOTAL CREDITS			TOTAL CREDITS			TOTAL CREDITS			TOTAL CREDITS		

Area of Focus: _____

GRADUATION REQUIREMENTS: Ready Core Graduation Requirements (22 Credits):

- 4 English
- 4 Math
- 3 Science
- 2 World Language (same)
- 1 Fine Art
- 1 U.S. History
- 1 AP European History, World History or Geography or AP Human Geography
- 0.5 Economics
- 0.5 Government
- 0.5 Personal Finance
- 1.5 Lifetime Wellness (.5 Wellness A, .5 Wellness B, .5 additional PE)
- 3 Focused Electives

College and Career Objectives:	Concerns:
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ORHS Course Catalog