

# Heritage High School Curriculum Guide 2024-2025 

Heritage High School<br>3741 East Lamar Alexander Parkway<br>Maryville, TN 37804<br>(865) 984-8110<br>www.hhscounselingcenter.com

## Please Note:

Heritage High School has made every effort to provide accurate information in this guide. However, students and parents/guardians should understand that specific programs, services, course offerings, and other information are subject to change at any time without notice.

## Table of Contents

INTRODUCTION ..... 5
ADVISING, SCHOOL COUNSELORS, \& ADMINISTRATION ..... 6
PARENT INVOLVEMENT ..... 7
GRADUATION REQUIREMENTS ..... 8
GRADING SCALE ..... 8
Framework of Standards for Honors Courses ..... 9
AP AND HONORS COURSES ..... 9
GRADE POINT AVERAGES AND COURSE WEIGHTING ..... 10
GRADE REPORTING ..... 11
ATHLETIC ELIGIBILITY ..... 11
EARLY DISMISSAL ..... 11
CHANGING STUDENT SCHEDULES ..... 12
ELIGIBILITY TO OBTAIN A DRIVER'S LICENSE ..... 12
COURSE DESCRIPTIONS ..... 13
ENGLISH ..... 14
Requirements for Enrollment in Honors English 9th OR 10th Grade ..... 15
Requirements for Enrollment in AP English ..... 16
English Course Descriptions ..... 16
English Department Electives ..... 18
MATHEMATICS ..... 19
Math Course Descriptions ..... 20
SCIENCE ..... 23
Science Course Descriptions ..... 24
SOCIAL STUDIES ..... 28
Social Studies Course Descriptions ..... 28
Social Studies Department Electives ..... 30
FOREIGN LANGUAGE ..... 32
PHYSICAL EDUCATION ..... 33
Physical Education Electives ..... 33
ACT PREP ..... 34
SERVICE LEARNING ..... 34
STEM ENDORSEMENT \& EDUCATION ..... 35
Agricultural Science STEM Studio ..... 36
Applied Math \& Science STEM Studio ..... 36
Computer Science STEM Studio ..... 37
Engineering \& Trades STEM Studio ..... 37
Health Science STEM Studio ..... 38
FINE ARTS ..... 39
Instrumental Music ..... 39
Choral Music ..... 40
Music Education ..... 41
Theatre ..... 41
Visual Art ..... 42
HUMANITIES ..... 44
GOVERNMENT \& PUBLIC ADMINISTRATION ..... 45
Air Force Junior ROTC ..... 45
SPECIAL EDUCATION ..... 47
CAREER \& TECHNICAL EDUCATION (CTE) ..... 49
ADVANCED MANUFACTURING ..... 49
Mechatronics Program of Study ..... 50
Welding Program of Study ..... 51
AGRICULTURE, FOOD, \& NATURAL RESOURCES ..... 51
Agricultural, Engineering, Industrial, \& Mechanical Systems Program of Study ..... 52
Veterinary and Animal Science Program of Study ..... 53
ARCHITECTURE \& CONSTRUCTION ..... 53
Residential \& Commercial Construction Program of Study ..... 54
ARTS. A/V TECHNOLOGY, \& COMMUNICATIONS ..... 55
Digital Arts \& Design Program of Study ..... 55
Audio/Visual Production Program of Study ..... 56
BUSINESS MANAGEMENT \& ADMINISTRATION ..... 57
Business Management Program of Study ..... 57
EDUCATION \& TRAINING ..... 58
Teaching as a Profession (K-12) Program of Study ..... 58
FINANCE ..... 59
Banking \& Finance Program of Study ..... 59
HEALTH SCIENCE ..... 60
Diagnostic Services Program of Study ..... 61
Emergency Services Program of Study ..... 62
Nursing Services Program of Study ..... 62
Sport \& Human Performance Program of Study ..... 63
Therapeutic Services Program of Study ..... 63
HOSPITALITY \& TOURISM ..... 64
Culinary Arts Program of Study ..... 64
HUMAN SERVICES ..... 65
Human \& Social Science Program of Study ..... 65
Cosmetology Program of Study ..... 66
INFORMATION TECHNOLOGY ..... 67
Cybersecurity Program of Study ..... 68
Coding Program of Study ..... 68
Web Design Program of Study ..... 69
Required Computer Credit Courses ..... 69
LAW, PUBLIC SAFETY, CORRECTIONS, \& SECURITY ..... 70
Criminal Justice \& Correction Services Program of Study ..... 70
MARKETING, DISTRIBUTION \& LOGISTICS ..... 71
Marketing Management Program of Study ..... 71
STEM (SCIENCE, TECHNOLOGY, ENGINEERING, \& MATHEMATICS) ..... 73
Engineering Program of Study ..... 73
Technology Program of Study ..... 74
TRANSPORTATION ..... 75
Automotive Maintenance \& Light Repair Program of Study ..... 75
Automotive Collision Repair Program of Study ..... 76
CAREER PRACTICUM \& WORK-BASED LEARNING ..... 77
PROGRAMS OF STUDY ..... 78
Career Technical Education (CTE) Programs of Study ..... 78
Humanities Program of Study ..... 82
Fine Arts Program of Study ..... 83
Physical Education Program of Study ..... 83


## INTRODUCTION

This Curriculum Guide is intended to familiarize students and their parents with the variety of course offerings at Heritage High School. It includes students' graduation requirements and other information needed to develop a comprehensive four-year plan to meet their individual needs.

The courses described in this booklet are potential offerings for the 2024-2025 school year. Through the registration process in the spring, an academic schedule will be developed based upon each student's graduation requirements and requests for elective courses. The courses listed here are subject to change and may not become part of the master schedule if there is insufficient demand.

While every effort has been made to make this Curriculum Guide clear, students and their parents often have questions about the course selection process. Please feel free to contact counselors, administrators, or teachers if you require additional assistance. Our phone number is (865) 984-8110. The Counseling Center website is www.hhscounselingcenter.com and counselor's emails are listed.

## ADVISING, SCHOOL COUNSELORS, \& ADMINISTRATION

Counselors are available at Heritage High School to provide assistance with educational advising, career and college planning, individual counseling, and consultation with parents and teachers. They can be reached by calling the Counseling Center Office or emailing the counselors.

Students transferring from other schools will meet with HHS counselors to develop a schedule. These students must bring several documents with them prior to registering: a withdrawal form and transcript from the previous school, a current Tennessee Health Department Record of Immunizations, documents of custodial arrangements, and a copy of their IEP if they receive special education services.

An administrator will be assigned to each grade level, and a school counselor will be assigned to sophomore, junior, and senior students by last name. Each year the same administrator and counselor will be assigned to the Ninth Grade Academy. For upperclassmen, both the administrator and counselor will remain with their assigned group until graduation.

Research has shown that the continuity of the same administrator and counselor will benefit students. Students and parents will become more familiar and more comfortable with opening the lines of communication between school and home. By everyone working together, there will be a greater opportunity to produce positive results in the areas of academics, attendance, discipline and career planning.

The administrator teams for the $\underline{\mathbf{2 0 2 4} \mathbf{2 0 2 5} \text { school year are as follows: }}$

| - Principal | Jed West | jed.west@blountk12.0rg |
| :--- | :--- | :--- |
| - Asst. Principal, 9th Grade | Dexter Day | george.day@blountk12.org |
| - Asst. Principal, Grade 10 | Holly Whitehead | holly.whitehead@blountk12.org |
| - Asst. Principal, Grade 11 | Jeff Sherman | jeff.sherman@.blountk12.org |
| - Asst. Principal,Grade 12, A-G Holly Whitehead | holly.whitehead@blountk12.org |  |
| - Asst. Principal,Grade 12, H-O Dexter Day | george.day@blountk12.org |  |
| - Asst. Principal, Grade 12, P-Z Jeff Sherman | jeff.sherman@blountk12.org |  |

The school counselors for the 2024-2025 school year are as follows:
All freshmen students will have the same school counselor. Sophomores, juniors, and seniors will be divided among counselors by last name. Graduation coaches also assist counselors. Those assignments are as follows:

- All 9th Grade Students
- 10th-12th Last Names A-G
- 10th-12th Last Names H-O
- 10th-12th Last Names P-Z
- Graduation Coach

Kayla Walker
Kim Galyon
Jackie Stryker
Isaac Bradshaw
Wanda DeWaard
kayla.walker@blountk12.org
kimberly.galyon@blountk12.org
jacqueline.stryker@blountk12.org
isaac.bradshaw@blountk12.org
wanda.dewaard@blountk12.0rg

## PARENT INVOLVEMENT

We find that students whose parents are connected to school tend to be more successful, and we encourage parent involvement as well as two-way communication between home and school in the following ways:

- Download the HHS App to stay informed on important information, access Teacher Websites and the Counseling Center site - www.hhscounselingcenter.com
- Access to student progress reports, grades and attendance is available online through PowerSchool Parent Portal. Parents must get their password and ID number from the Principal's secretary. Students should also have login information for their PowerSchool account.
- We host several workshops for parents on topics parents have requested information about including choosing courses, ninth grade registration, planning for the senior year, planning for college, seeking financial aid and scholarships and dual enrollment options.
- We host Open House twice per year; right after the beginning of each semester.
- Our "Mountaineer Life" weekly newsletter is sent out on Friday each week during the school year to the parent/guardian email address in PowerSchool.
- Call or email your child's teacher for updates. All of our teachers have email and phones with voicemail, and parents are encouraged to contact teachers. An email list for Heritage teachers can be accessed by clicking the "Phone/E-mail List" link on the Blount County Schools homepage.
- We hope that parents will attend school events. Our students participate in a wide array of public events including athletic contests, musical concerts, and theater performances.
- Follow us on social media at:
- Facebook: HeritageMountaineers
- Instagram: @hhs_mountaineers
- X/Twitter: @HHSmountaineers


## GRADUATION REQUIREMENTS

State Core Curriculu
English
Mathematics*
Science
Social Studies
Physical Fitness
Fine Arts
Foreign Language
Personal Finance
Program of Study

Local Requirement

Computer Course

Electives

## Credits Requirements

English I, II, III, IV
Alg. I, Geometry, Alg. II, one upper level math Biology I, Chemistry or Physics, and one additional lab science class (such as Env. Science) World History \& Geography, US History, Economics .5 credit, US Government .5 credit Wellness, Personal Fitness .5 credit
Art, Music, Theatre, Digital Design
Must be in same language- Spanish or French .5 credit paired with Personal Fitness CTE, Humanities, Fine Arts, Physical Education, JROTC, AP/Honors, or Math \& Science (above graduation requirements).

Intro to Computer Science, Computer Science Foundations $L D C$, or AP Computer Science Principles

## The HHS Diploma Requires 28 credits

*Students must take a math course each year of high school including at least Algebra I, Geometry, Algebra II and one class beyond Algebra II.

## GRADING SCALE

Heritage High School uses the following grading scale:

| Grading System |  |  |  |  |  |
| :---: | :---: | :--- | :--- | :--- | :---: |
| Grade | Percent <br> Range | Weighting for Honors <br> and Adv. Honors courses | Weighting for Industry <br> Credentials, DE, SDC, <br> and LDC courses | Weighting for <br> Advanced Placement <br> courses |  |
| A | $90-100$ | Will include the addition <br> of 3 percentage points to <br> the grades used to <br> calculate the semester <br> average. | Will include the addition <br> of 4 percentage points to <br> the grades used to <br> calculate the semester <br> average. | Will include the addition <br> of 5 percentage points to <br> the grades used to <br> calculate the semester <br> average. |  |
| B | $80-89$ |  |  |  |  |
| C | $70-79$ |  |  |  |  |
| D | $60-69$ |  |  |  |  |
| F | $0-59$ |  |  |  |  |

*Assigning additional quality points above 4.0 for honors courses, AP, and National Industry certification courses is not allowed for the purpose of determining eligibility for the lottery scholarships.

## Framework of Standards for Honors Courses

Honors courses will substantially exceed the content standards, learning expectations, and performance indicators approved by the State Board of Education. Teachers of honors courses will model instructional approaches that facilitate maximum interchange of ideas among students: independent study, self-directed research and learning, and appropriate use of technology. All honors courses must include multiple assessments exemplifying coursework (such as short answer, constructed response prompts, performance-based tasks, open-ended questions, essays, original or creative interpretations, authentic products, portfolios, and analytical writing). Additionally, an honors course shall include a minimum of five of the following components.
i. Extended reading assignments that connect with the specified curriculum.
ii. Research-based writing assignments that address and extend the course curriculum.
iii. Projects that apply course curriculum to relevant real-world situations. These
may include oral presentations, PowerPoint, or other modes of sharing findings.
Connection of the project to the community is encouraged.
iv. Open-ended investigations in which the student selects the questions and designs the research.
v. Writing assignments that demonstrate a variety of modes, purposes, and styles.
I. Examples of mode include narrative, descriptive, persuasive, expository, and expressive.
II. Examples of purpose include informing, entertaining, and persuading.
III. Examples of style include formal, informal, literary, analytical, and Technical.
vi. Integration of appropriate technology into the course of study.
vii. Deeper exploration of the culture, values, and history of the discipline.
viii. Extensive opportunities for problem solving experiences through imagination, critical analysis, and application.
ix. Job shadowing experiences, with presentations that connect class to the world of work.

All course types which meet the above framework will be classified as honors, eligible for additionally percentage point weighting.

## AP AND HONORS COURSES

Heritage High School offers academic courses that are designated as honors or AP/Advanced Placement. These courses offer our academically talented students opportunities to expand and excel in various core areas as they prepare for the rigors of university work. AP courses also prepare students to take the Advanced Placement examinations in the spring, which will provide them with the opportunity to earn college credit in those subjects. We strongly urge students with outstanding abilities to enroll in these courses.

## GRADE POINT AVERAGES AND COURSE WEIGHTING

Grade point averages (GPA) are calculated at the end of each term. Blount County Schools use a weighted G.P.A. to determine academic honors recognition for seniors using the Latin System below. Summa Cum Laude: 4.35 and above, Magna Cum Laude: 4.175-4.34, Cum Laude: 3.95-4.174

The following courses are weighted:

Algebra I Honors
Algebra II Honors
Biology I Honors
Biology II Adv. Honors
Chemistry I Honors
Ecology Adv. Honors
English I Honors
English II Honors
English III Adv. Honors
English IV Adv. Honors
European History Adv. Honors
Geometry Honors
Heritage Singers Honors
Human Anatomy Honors
Physics Adv. Honors
Physics Honors
Pre-Calculus Honors
Prob \& Stats Adv. Honors
US History Adv. Honors
US History Honors
Wind Ensemble Honors
Psychology SDC
US History $\boldsymbol{S D C}$
Agriscience LDC
A/V Production I LDC
Computer Science Foundations $\boldsymbol{L D C}$

Cosmetology I LDC
Criminal Justice I LDC
Culinary Arts III LDC
Digital Arts \& Design I LDC
Fundamentals of Construction $\boldsymbol{L D C}$
Health Science Education $\boldsymbol{L D C}$
Introduction to Business \& Mktg. LDC
Introduction to Collision Repair $\operatorname{LDC}$
Introduction to Computer Science LDC
Introduction to Teaching as a Prof. $\boldsymbol{L D C}$
Maintenance \& Light Repair I LDC
Marketing \& Management I LDC
Marketing \& Management II LDC
Principles of Engineering \& Tech $\boldsymbol{L D C}$
Principles of Manufacturing $\boldsymbol{L D C}$
Social Media \& Analytics LDC
Web Design Foundations $\boldsymbol{L D C}$
$\boldsymbol{A P}$ Biology
$\boldsymbol{A P}$ Calculus AB
$\boldsymbol{A P}$ Calculus BC
AP Computer Science
Principles
$\boldsymbol{A P}$ Environmental Science
$\boldsymbol{A P}$ European History
$\boldsymbol{A P}$ Human Geography
$\boldsymbol{A P}$ Language \& Composition
$\boldsymbol{A P}$ Literature \& Composition
$\boldsymbol{A P}$ Physics
$\boldsymbol{A P}$ Probability \& Statistics
AP Psychology
$\boldsymbol{A P}$ Research
$\boldsymbol{A P}$ Seminar
$\boldsymbol{A} \boldsymbol{P}$ US Government
$\boldsymbol{A P}$ US History
Digital Electronics $\boldsymbol{D E}$
Emergency Services $\boldsymbol{D E}$
Collision Repair I DE
Collision Repair II $\boldsymbol{D E}$
Cosmetology II DE
Cosmetology III DE
Criminal Justice II $\boldsymbol{D E}$
Criminal Justice III $\boldsymbol{D E}$
Maintenance \& Light Repair II $\boldsymbol{D E}$
Maintenance \& Light Repair III DE
Mechatronics DE
Medical Terminology $\boldsymbol{D E}$
Teaching as a Profession II $\boldsymbol{D E}$
Welding I DE
Welding II $\boldsymbol{D E}$
Probability \& Statistics $\boldsymbol{D E}$
English Composition $\boldsymbol{D E}$
Other online AP \& DE courses
available per approval

* Advanced Placement weighting will follow these guidelines:

1. Semester long AP classes will receive AP weighting for $\mathbf{1}$ credit (1.0 added value).
2. Year long AP classes will receive honors weighting for 1 credit earned in the fall semester (Adv. Honors) and will receive AP weighting for 1 credit earned in the spring semester.
3. Students must sit for the culminating exam to receive additional quality point weighting.

* Dual Enrollment classes will be given the following weighting ( 1.0 added value).
* Statewide Dual Credit (SDC) classes and Local Dual Credit (LDC) will be given the following weighting ( 1.0 added value). Students must sit for the culminating exam to receive additional quality point weighting.

The following scale is used to determine GPAs:

|  | QUALITY POINTS |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Grade | Regular Course | Honors Course | DE, SDC and <br> LDC | Adv. Honors and <br> Adv. Placement |
| $\mathbf{9 0 - 1 0 0}$ | 4.0 | 4.5 | 5.0 | 5.0 |
| $\mathbf{8 0 - 8 9}$ | 3.0 | 4.5 | 4.0 | 4.0 |
| $\mathbf{7 0 - 7 9}$ | 2.0 | 2.5 | 3.0 | 3.0 |
| $\mathbf{6 0 - 6 9}$ | 1.0 | 1.5 | 2.0 | 2.0 |
| Below 60 | 0.0 | 0.0 | 0.0 | 0.0 |

## GRADE REPORTING

The 2024-2025 academic year for grades 9-12 will be divided into two terms of 18 weeks. Each 18 -week term generates one full credit in each course passed with a grade of 60 or higher. Grade Cards are printed two times during the 18 -week term: at the end of the First Nine Weeks and at the end of the term. Midterm Progress Reports are completed at the midpoint ( $41 / 2$ weeks) of each nine-week grading period. These Progress Reports are computer generated for each class in which a student is enrolled that semester. It is the student's responsibility to take them home to their parents. After completing the First Nine Weeks, students are given their grade card to take home.

## ATHLETIC ELIGIBILITY

To be eligible to participate in athletic competition at Heritage High School, a student must earn six credits the preceding school year. All credits must be earned by the first day of the beginning of the school year. Student athletes who are ineligible for the first term of the school year can gain eligibility by earning credit in three courses before the spring term.

## EARLY DISMISSAL

Students must attend the full school day unless they are seniors enrolled in the Early Dismissal
Program or Work-Based Learning Program. The following criteria must be met for Early Dismissal:

1. Student must be a senior.
2. Student must be enrolled in at least four courses for credit and must be on track to graduate.
3. Student must complete the application process and obtain all necessary signatures.
4. Student must have a 2.0 GPA and at least 22 credits at the start of their senior year.

## CHANGING STUDENT SCHEDULES

The Master Schedule at Heritage High School is developed around student requests through the registration process. Classes and the student-to-teacher ratio are determined by these requests. Teachers are hired and assigned, and materials are obtained for courses based upon these student requests. The individual student schedule should be decided with great care by both parents and students. This is a CONTRACT that must be followed in order to provide optimal instructional opportunities for all students. Course offerings and schedules are subject to change based upon student requests and the registration process. No student can be guaranteed a particular schedule. However, every effort will be made to balance schedules and meet individual student needs. Because changes in course requests affect class organization and teacher assignments, they will be considered only under the following circumstances.

1. An error has been made in the scheduling of requested classes.
2. A course is needed by a 12 th grade student in order to graduate.
3. A student passed a course he/she assumed would be failed or he/she failed a course needed.
4. A course was completed through Credit Recovery.

It is the student's responsibility to report any of the above situations to the Counseling Center. Changes can be considered on a space-available basis.

Students may NOT drop courses once the semester begins. Teacher recommendations are used to determine English, Math and Science placement. If students or parents feel the placement needs to be reconsidered, they can fill out an Academic Release Form in the Counseling Center for consideration. Forms can also be found at www.hhscounselingcenter.com

## ELIGIBILITY TO OBTAIN A DRIVER'S LICENSE

Students must present a "1010 Form" to the Department of Motor Vehicles in order to take the driver's test to obtain a permit or license. This form is available from the Heritage Student Affairs Office upon request. The State of Tennessee requires teen drivers to be attending school regularly and making progress towards graduation or this privilege can be revoked.

## COURSE DESCRIPTIONS

The courses described here are potential offerings for the 2024-2025 year and may be offered for fall term, spring term, or both terms. All elective courses are subject to change and may not become part of the final schedule if there is insufficient demand.

## ENGLISH

- Four units of English are required for graduation, and one should be selected each year from the normal sequence.
- No student may take two different levels of English at the same time.
- End of Course TN Ready exams are given at the ninth and tenth grade levels.

At the freshman level, two English options are offered: College Prep English I and Honors English I. At the sophomore level, three English options are offered: College Prep English II, Honors English II, and Honors English II paired with AP Seminar. At the junior level, there are two options: English III College Prep and Advanced Placement Language and Composition. At the senior level, there are four options: English IV College Prep, Dual Enrollment English 1010 (must meet specific requirements), AP Literature and Composition, and AP Literature and Composition paired with AP Research (not to be offered until the 24-25 academic year).

The AP Seminar course will tentatively be offered to 10th grade Honors English students in the 2023-24 academic year. Those students would then be eligible for AP Research in 12th grade (2025-26). The AP Seminar and Research Certificate is granted to students who earn scores of 3 or higher in both AP Seminar and AP Research. The AP Capstone Diploma is granted to students who earn scores of 3 or higher in AP Seminar and AP Research as well as on four additional AP exams of their choosing. Advanced Placement and Honors English courses are weighted which increases students' weighted GPAs. Final averages are adjusted three points in Honors English classes and five points in Advanced Placement (AP) classes. These adjustments help equalize student's GPAs that are unweighted. Advanced Placement English courses and Honors level English courses are year-long. Honors English and Advanced Placement English students complete a summer reading and/or vocabulary requirement. These may be obtained from the student's English teacher in the spring, the Counseling Center during the summer or on the Counseling Center website www.hhscounselingcenter.com

|  | Regular |  | Honors |
| :---: | :---: | :---: | :---: |
| 9th Grade | Content Reading <br> 1/English 1 <br> (2 semesters) |  | Content Reading <br> Honors 1/English 1 <br> Honors <br> $(2$ semesters $)$ |
| 10th Grade | Content Reading <br> 2/English 2 <br> (2 semesters) | Content Reading <br> Honors 2/English 2 <br> Honors <br> $(2$ semesters $)$ | English 2 Honors/AP <br> Seminar <br> $(2$ semesters) |
| 11th Grade |  |  | English 3 Honors/AP <br> English Language <br> (2 semesters) <br> Or |
|  | English 3 |  |  |
| (1 semester) |  | AP English <br> Language/AP Seminar <br> (2 semesters) |  |


| 12th Grade | English 4 <br> (1 semester) | Dual Enrollment English 1010 \&/or 1020 (1 semester) | English 4 Honors/AP English Literature <br> ( 2 semesters) Or AP English Literature/AP Research ( 2 semesters) |
| :---: | :---: | :---: | :---: |

## Requirements for Enrollment in Honors English 9th OR 10th Grade

Comprehensive student data from grades 3-8 is reviewed each year by the Freshman Academy leadership team in order to identify and place students in the Honors English program as a freshman. When students transfer from outside the Blount County School System, past English course grades and parent requests are considered. Depending on the time of enrollment, students may be given a grade-level benchmark exam prior to the student's placement. Enrollment in or completion of a foreign language is encouraged in the tenth or eleventh grade to ensure students meet university and college expectations.

While student data is reviewed holistically prior to entry in the Honors English program, students and parents are encouraged to reach out with any questions or concerns regarding freshman placement for English by emailing Mrs. Amanda Clark at Amanda.Clark@BlountK12.org. Student performance in English I Honors or College Prep English I may signify that a change in placement is needed prior to the student's sophomore year at which point the student's English I teacher shall make the appropriate recommendation.

General markers that signify students have a high likelihood of being successful in an Honors English I or II course are as follows:

## Ninth Grade English Honors:

- The student meets or exceeds expectations on their 7th and/or 8th grade English/Language Arts TCAP score(s).
- The student is above grade-level mastery on the mid-year and final 8th grade iReady benchmarks.
- The student demonstrates a consistent understanding of organization and development in writing.


## Tenth Grade English Honors:

- The student meets or exceeds expectations on their English I TNReady exam.
- The student is at or above the 80th percentile on multiple English I benchmarks.
- The student's writing across their 9th grade year demonstrates consistency with grade-level proficiency expectations or shows substantial growth towards that across multiple writing types.


# Requirements for Enrollment in AP English 

It is recommended that students should meet the following criteria with teacher recommendation considered above the others.; however, in alignment with College Board policies, any student who is willing to take on the challenge of an AP level course will be accepted.

## Eleventh Grade Advanced Placement English:

- Teacher recommendation
- 3.0 or higher weighted GPA
- A minimum 90 average in sophomore Honors English


## Twelfth Grade Advanced Placement English:

- A minimum 88 average in AP Language Eleventh Grade English
- Teacher recommendation
- A 3.2 or higher weighted GPA


## English Course Descriptions

## English I College Prep - 2 semesters/2 credits

Grade 9
The students will learn, practice and internalize strategies that are essential life long learning skills for reading, writing, understanding, and interpreting content specific materials. These strategies will be applied in the content areas of English, Mathematics, Science, and Social Studies. This course focuses on fundamental reading and writing skills. All strands of the state curriculum are covered with emphasis on literary analysis, paragraphing, and practice of narrative, descriptive, and expository writing, formal oral communication skills, and mastery of library tools for research. Skills necessary to pass the End of Course test are stressed. This is a year-long course.

## Honors English I-2 semesters/2 credits

Grade 9
This course involves more in-depth study and understanding of reading and writing skills than English I College Prep. Students with strong language arts skills are encouraged to enroll in the Honors courses. A major research project, including a speech and research paper, is included. A summer reading and vocabulary assignment is a requirement for the course. This is a year-long course.

## English II College Prep - 2 semesters/2 credits

Grade 10
Sophomore-level strands of the state curriculum continue with more writing, research, and literary analytical skills emphasized. Students will continue to enrich their vocabulary through various activities; explore various essential questions centered around the American Dream; and examine the historical, cultural, and geographical influences on American Literature. The literature focuses on multicultural issues and international writers. Skills necessary to pass the End of Course test are stressed. This is a year-long course.

## Honors English II - 2 semesters/2 credits

Grade 10
Honors level objectives continue with above grade-level literary selections, an increased number of compositions and oral presentations, and an emphasis on vocabulary development. Students complete essays in narrative, expository, and argumentative modes. A summer reading and vocabulary assignment is a requirement for the course. Skills necessary to pass the End of Course test are reviewed. This is a year-long course.

Grade 10
AP Seminar, the first course in the AP Capstone ${ }^{\mathrm{TM}}$ Program, is a foundational course that engages students in cross-curricular conversations exploring the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Students use College Board's QUEST Framework as they investigate a student-selected problem or issue, analyze arguments, compare different perspectives, synthesize information from multiple sources, and work alone and in a group to communicate their ideas. Offered in conjunction with Honors English II, students are awarded college credit based on scoring of their classwork portfolio using College Board prompts completed throughout the year and on the course AP Exam in May. Note: The AP Seminar and Research Certificate is granted to students who earn scores of 3 or higher in both AP Seminar and AP Research. The AP Capstone Diploma is granted to students who earn scores of 3 or higher in AP Seminar and AP Research and on 4 additional AP Exams of their choosing.

## English III College Prep-1 semester/1 credit

Grade 11
This course uses American literature as a springboard for literary analysis and formal oral communication. Students continue essay development, referencing and research skills, critical thinking,and oral communication skills. Students will continue to enrich their vocabulary through various activities; explore various essential questions centered around the American Dream; and examine the historical, cultural, and geographical influences on American Literature. Students also prepare specifically for the ACT.

## Advanced Honors/AP English III Language \& Composition - 2 semesters/2 credits Grade 11

AP English Language and Composition is an introductory college-level composition course. Students cultivate their understanding of writing and rhetorical arguments through reading, analyzing, and writing texts as they explore topics like rhetorical situation, claims and evidence, reasoning and organization, and style.This course is for students with exceptional reading and writing skills who are interested in further developing their writing and analysis skills through an intensive study of rhetoric. Students with satisfactory performance on the AP Exam will earn college credit for courses in English, Composition, or Humanities as directed by the college of his or her choice. Additionally, this course offers student-selected project-based learning through the We Service Endorsement, meaning students can receive an extra certification on their transcripts and be reported to prospective colleges.Students enrolled in the course are encouraged to take the AP English Language and Composition exam in May. A summer reading and vocabulary assignment is a requirement for the course. Students must sit for the culminating exam to receive additional quality point weighting. This is a year-long course.

## English IV College Prep-1 semester/1 credit

Grade 12
This course studies the evolution of literature from the Anglo Saxon era of Beowulf to the middle ages with Shakepeare's Macbeth and to the future with Fahrenheit 451 in order to develop critical thinking and oral expression along with paired short stories and poems. Students complete several literary analysis essays as well as a research paper while honing their oral communication skills through two presentations. This course is designed so students have the option of continuing their education and/or preparing all students for success in the real world through the creation of cover letters and resumes.

## Advanced Honors/AP English IV Literature \& Composition - $\mathbf{2}$ semesters/2 credits Grade $\mathbf{1 2}$

AP English Literature and Composition is an introductory college-level literary analysis course. Students cultivate their understanding of literature through reading and analyzing texts as they explore concepts like character, setting, structure, perspective, figurative language, and literary analysis in the context of literary works. Students will continue to develop their skills in literary analysis as they prepare for the AP

English Literature and Composition exam in May. Students with satisfactory performance on the AP Exam will earn college credit for courses in English, Composition, or Humanities as directed by the college of his or her choice. A summer reading and vocabulary assignment is a requirement for the course. Students must sit for the culminating exam to receive additional quality point weighting. This is a year-long course.

AP Research/AP English IV Literature \& Composition - $\mathbf{2}$ semesters/ $\mathbf{2}$ credits
Grade 12
AP Research, the second course in the AP Capstone experience, allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan, and implement a yearlong investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical research practices, and accessing, analyzing, and synthesizing information. Students reflect on their skill development, document their processes, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of 4,000-5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense. AP English Literature and Composition is an introductory college-level literary analysis course. Students cultivate their understanding of literature through reading and analyzing texts as they explore concepts like character, setting, structure, perspective, figurative language, and literary analysis in the context of literary works. Students will continue to develop their skills in literary analysis as they prepare for the AP English Literature and Composition exam in May. Students with satisfactory performance on the AP Exam will earn college credit for courses in English, Composition, or Humanities as directed by the college of his or her choice. A summer reading and vocabulary assignment is a requirement for the cours. Students must sit for the culminating exam to receive additional quality point weighting. This is a year-long course.

## English Department Electives

## Creative Writing I-1 semester/1 credit

Grades 9, 10, 11, 12
Creative Writing focuses on developing the identity and habits of a writer through writing practice. A mixture of personal and fictional writing is included. Students can also expect to cover various writing skills including grammar and vocabulary development.

## Literature in Film - 1 semester/1 credit

Grades 10, 11, 12
This course is driven by the National Film Study Standards and explores a variety of film types and units of study, including film history, shot composition, scriptwriting basics, story mapping, editing techniques, and genre-based study. Focus includes the language of film, development of techniques for analysis, appreciation of silent and scored films, and impacts of film on society. Students will view and analyze a variety of works of cinema and research film history and genres in class. Students are expected to be present for viewing and discussing films and will create a Five Shot Sequence, a Movie Trailer, and an original short film during the semester.

## Mythology - 1 semester/1 credit

Grades 10, 11, 12
This course is an elective study of a variety of Greek and Roman mythology, designed to give students a solid background in Classical Mythology and will focus on the myths, gods, and goddesses from cultural, historical, and literary perspectives. Students will read and analyze several different versions/translations of the same myth. A word study component is included, highlighting allusions that continue into modern day literature and life. The course culminates in a final project concerning mythological archetypes. Because it is included in the Humanities cluster, English skills are emphasized and reinforced.

## MATHEMATICS

The Mathematics Department attempts to meet the needs of all students by offering a wide range of courses throughout the four years. A math class is required all four years of high school. Credits must be earned in Algebra I, Geometry, Algebra II and one upper level class beyond Algebra II.

| Starting with the Class of 2025 | Basic | Regular | Honors | Honors |
| :---: | :---: | :---: | :---: | :---: |
| 9th Grade | Algebra 1 CP <br> (2 semesters) | Algebra 1 CP <br> (2 semesters) | Algebra 1 Honors ( 2 semesters) | Algebra 2 Honors ( 2 semesters) |
| 10th Grade | Geometry <br> (1 semester) | Geometry CP A/B <br> (2 semesters) | Algebra 2 Honors A/B (2 semesters) | Geometry Honors A/B <br> (2 semesters) <br> With the option to add Honors Pre-Calculus (1 semester) |
| 11th Grade | Algebra 2 <br> (1 semester) | Algebra 2 CP A/B (2 semesters) | Geometry Honors A/B <br> (2 semesters) <br> With the option to add Honors Pre-Calculus (1 semester) | AP Calculus AB/BC <br> (2 semesters) Or <br> AP Probability \& Statistics (2 semesters) Or Honors Pre-Calculus (1 semester) |
| 12th Grade | Senior Math (1 semester) | Probability \& Statistics <br> (1 semester) Or <br> Dual Enrollment Prob \& Stats (1 semester) Or <br> Dual Enrollment College Algebra (1 semester) | AP Calculus AB/BC <br> (2 semesters) Or <br> AP Probability \& Statistics ( 2 semesters) Or Honors Pre-Calculus (1 semester) | AP Calculus AB/BC <br> (2 semesters) Or <br> AP Probability \& Statistics (2 semesters) |

## Math Course Descriptions

## Algebra I A/B-2 semesters/2 credits

Grade 9
Algebra I is taken as a two-term class in $9^{\text {th }}$ grade. Students earn an elective credit for the IA semester. The Algebra IB semester includes the state TNReady Exam, near the end of the semester, and is the semester when the math credit is awarded. Algebra I students cover quadratics, polynomials and factoring, rational equations, and functions. This is a year-long course. Algebra IB must be passed to meet the Algebra I graduation requirement.

## Math Intervention/RTI Tier 3-1 semester/ 1 credit

Grade 9
This course will attempt to bridge gaps in math/algebra skills, allow for additional preparation for the Algebra I TNReady Exam, and assist students with study, organizational, and test taking skills. This course will take place concurrently with Algebra I and an attempt will be made to keep a low teacher to student ratio in order to maximize the learning of each student. Students who pass this course will earn an elective credit, but this course does not satisfy a math graduation requirement.

## Honors Algebra I A/B-2 semesters/2 credits Grade 9

This is a fast-paced course with an in-depth study of all topics taught in Algebra I in addition to a minimum of five components from the Framework of Standards for Honors Courses. Placement will be determined by previous testing data and/or high school teacher recommendation.Students will sit for the TNReady Exam near the end of the year. This is a year-long course. Honors Algebra IB must be passed to meet the Algebra I graduation requirement.

## Skills for Math Credit Recovery - 1 semester/1 credit

Grades 10, 11, 12
This course is for students who need to recover a credit in Algebra I, Algebra II, or Geometry. Students work through an online course, which includes tutorial videos, practice problems, and tests. A math teacher will facilitate and assist students.

Geometry - 1 semester/1 credit

## Prerequisites: Algebra I A/B

This course contains the major topics of unified geometry. Students will sit for the TNReady Exam near the end of the semester.

## Geometry A/B College Prep - 2 semesters/2 credits

## Prerequisites: Algebra I A/B

This course consists of topics in plane and solid geometry with emphasis on definitions, postulates, theorems, and inductive reasoning. Students will sit for the TNReady test near the end of the year. This is a year-long course. Geometry IB must be passed to meet the Geometry graduation requirement.

## Honors Geometry A/B-2 semesters/2 credits

## Grades 9, 10, 11

## Prerequisites: Honors Algebra I and Honors Algebra II

This class will explore the principles and concepts of Euclidean Geometry including logic and proofs. Students will sit for the TNReady Exam near the end of the year. This is a year-long course. Honors Geometry B must be passed to meet the Geometry graduation requirement.

## Algebra II - 1 semester/1 credit

Grades 11

## Prerequisites: Algebra I A/B required and Geometry preferred

This non-review, one semester course will survey approximately twelve units of study: systems of equations, inverses, analyzing functions, quadratics, polynomials, rational expressions/equations, radical
expressions/equations, exponential functions, logarithmic functions, sequences/series, statistics \& probability, and trigonometry.

## Algebra II College Prep - 2 semesters/ 2 credits

Grades 11
Prerequisites: Algebra I A/B required and Geometry preferred
This fast-paced, non-review, two semester course will cover approximately twelve units of study: systems of equations, inverses, analyzing functions, quadratics, polynomials, rational expressions/equations, radical expressions/equations, exponential functions, logarithmic functions, sequences/series, statistics \& probability, and trigonometry. Students intending to go deeper into the course, continue to pre-calculus, and students considering a math or science major should enroll in Algebra II CP. This is a year-long course. Algebra IIB must be passed to meet the Algebra I graduation requirement.

## Honors Algebra II - 2 semesters/ $\mathbf{2}$ credits

Grades 9, 10
Prerequisites: Honors Algebra I A/B
This is a fast-paced course with an in-depth study of all topics taught in regular Algebra II and with special emphasis on inequalities and additional topics. All Honors classes will require an increased amount of homework and study time outside of class. Students will sit for the TNReady Exam near the end of the year. This is a year-long course. Honors Algebra IIB must be passed to meet the Algebra I graduation requirement.

## Probability \& Statistics - 1 semester/1 credit

Grades 11, 12
Prerequisite: Students may enroll with a "C" or better in Algebra II CP
Statistics is non-calculus in its orientation and designed to introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The major themes in Statistics include: interpreting categorical and quantitative data, conditional probability and other rules of probability, using probability to make decisions, and making inferences and justifying conclusions. Statistics is intended for students interested in business, social sciences, education, and data analysis.

Advanced Honors/AP Probability \& Statistics - 2 semesters/2 credits Grades 11, 12
Prerequisites: Students may enroll with an 89 or above average in Geometry CP or Honors and Algebra II CP or Honors
This course includes the study of permutations, combinations, formulas, probability distributions, graphs, regression, regression analysis, surveys, Z-scores, and the study of statistical analysis and applications in the context of given problems. AP - Statistics is a two - semester course intended for students seeking college credit in Statistics. Students will receive 2 credits for this course. The fall semester will count as an Honors credit in Statistics and the spring semester will count as an AP - credited course. Students must sit for the culminating exam to receive additional quality point weighting. This is a year-long course

## AP Pre-Calculus - 1 semester/1 credit

Grades 10, 11, 12
Prerequisites: Honors Algebra II and Honors Geometry or recommendation of current math teacher
The course includes a study of linear relations and functions, theory of equations, vectors, circular functions, polar equations, parametric equations, trigonometric functions, and analytical geometry.

## AP Calculus AB/BC - 2 semesters/2 credits

Grades 11, 12
Prerequisite: Pre-Calculus
Note: Students must register for both semesters.
AP Calculus is an advanced study of college calculus. Students will study limits, differentiation, applications of differentiation, integration, applications of integration, transcendental functions, infinite sequences and series, vector calculus, etc. The course is designed to not only allow for the opportunity for college credit but also to provide the rigor and concepts necessary to compete with other elite students at
the next level. Students must sit for the culminating exam to receive additional quality point weighting. This is a year-long course.

## Bridge Math - 1 semester/1 credit

Grades 12
Recommended for students scoring less than a 21 in Math on the ACT
Bridge math is a review of Algebra 1 and basic Algebra 2 concepts including Geometry. This course develops various concepts of math verbally, symbolically, graphically, and numerically. It also explores applications with numbers, geometrics, functions, and data.This math counts as a fourth math requirement for graduation, but it will not meet NCAA Math Requirements.

## AP Computer Science Principles - 1 semester/1 credits

Grades 9, 10, 11, 12
Prerequisite: Algebra I
This course offers a multidisciplinary approach to teaching the underlying principles of computation. In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course engages students in the creative aspects of the field by allowing them to develop computational artifacts based on their interests. Students will also develop effective communication and collaboration skills by working individually, collaboratively to solve problems, and will discuss and write about the impacts these solutions could have on their community, society, and the world. Students must sit for the culminating exam to receive additional quality point weighting. This course satisfies the Computer Science graduation requirement. Satisfies the 4th math credit for graduation.

Dual Enrollment Probability and Statistics - 1 semester
Grades 11, 12
Prerequisites: Students need an ACT Math and ACT Reading scores of at least 19 or equivalent and at least a B in Algebra II
Topics include elementary probability theory, concepts of descriptive statistics, discrete and continuous distributions, hypothesis testing, confidence intervals, sample sizes, correlation, regression, multinomial and contingency tables. Non Calculus-based computer applications will be investigated with a required Capstone project. This is a General Education course transferable within the Tennessee Board of Regents system. Students will receive 3 college credits for this course, Math 1530.

## SCIENCE

Students entering high school are required to pass Biology, Chemistry or Physics, and one additional laboratory science course to meet Tennessee graduation requirements. All honors courses must include multiple assessments exemplifying coursework (such as short answer, constructed-response prompts, performance-based tasks, open-ended questions, essays, original or creative interpretations, authentic products, portfolios, and analytical writing). There will be a minimum of five additional components as determined by your teacher. Advanced Placement (AP) courses will substantially incorporate the learning objectives and course descriptions as defined by the College Board.

There are several sequences to complete the state requirement for graduation. These suggested sequences are guidelines for students planning their science course sequence. Individual circumstances may allow for variations in sequence, and students will be placed based on a variety of factors. Thus, the final course sequence and schedule for each student will be determined on an individual basis. Progress into 10th grade science is determined by the 9 th grade math score and recommendation of the science teacher.

|  | Basic | Regular | Honors |
| :---: | :---: | :---: | :---: |
| 9th Grade | ```Environmental Science CP (1 semester) Or Agriscience LDC (1 semester)``` | Environmental Science CP (1 semester) $O r$ Agriscience LDC (1 semester) Or Biology IA/IB CP (EOC) (2 semesters) | Biology IA/IB Honors (EOC) <br> (2 semesters) |
| 10th Grade | Biology IA/IB CP <br> (EOC) <br> (2 semesters) | Biology IA/IB CP (EOC) <br> (2 semesters) Or <br> Honors Human Anatomy \& Physiology (1 semester) | Chemistry I Honors <br> (1 semester) <br> Or <br> Physics Honors <br> (1 semester) Or <br> Chemistry I or Physics <br> (1 semester) And/or <br> Honors Human <br> Anatomy \& Physiology <br> (1 semester) <br> And/Or <br> AP Biology <br> (Teacher Rec required) <br> ( 2 semesters) |
| 11th Grade | Applied Physical Science <br> (1 semester) <br> And/Or <br> Applied Physics | Chemistry I Or <br> Physics <br> (1 semester) | Honors Human Anatomy \& Physiology <br> (1 semester) Or |


|  | (1 semester) | and <br> Honors Human <br> Anatomy \& Physiology <br> (1 semester) <br> Or <br> AP Science Course <br> (2 semesters) | AP Science Course ( 2 semesters) |
| :---: | :---: | :---: | :---: |
| 12th Grade | Science <br> Electives | Science <br> Electives | Science <br> Electives |

## Science Course Descriptions

## Biology I A/B - $\mathbf{2}$ semesters/ $\mathbf{2}$ credits

Grade 10
This course earns 1 elective credit during the first semester and 1 science credit during the second semester. Biology I A/B is a yearlong course that introduces you to the world of living things. Students will be exploring basic life processes, interdependence and interactions within the environment, cultural and historical scientific contributions and current and emerging technologies. Students experience the content of Biology I through an inquiry approach. Using available technology, students investigate the world around them. Biology I will provide students with knowledge, prerequisite skills, and habits of mind needed for living and ethical decision making. This course provides a foundation for advanced biological studies and personal career choices. Students will study units covering, Chemistry of Life, Cells, Cellular Transport, Cellular Metabolism, Cell Growth and Reproduction, Heredity DNA-RNA-Protein Synthesis, Gene Technology, Biological Evolution, Classification of Organisms, Flow of Matter and Energy, and Ecology. This course has a State End of Course Exam (EOC). This is a year-long course.

## Biology I-1 semester/1 credit

Grades 10, 11, 12
Biology I introduces students to the world of living things. The students explore the following: basic life processes at the molecular, cellular, systemic, organismal, and ecological levels of organization within the biosphere; interdependence and interactions within the environment including relationships, behavior, and population dynamics; cultural and historical scientific contributions of men and women; evidence that supports biological evolution; and current and emerging technologies. Students experience the content of Biology I through an inquiry approach. Using available technology, students investigate the world around them. Biology I will provide students with knowledge, prerequisite skills, and habits of mind needed for living and ethical decision making. This course provides a foundation for advanced biological studies and personal career choices. This course has a State End of Course Exam.

## Honors Biology I A/B - $\mathbf{2}$ semesters/ $\mathbf{2}$ credits

Grade 9
This course is taught to first time freshmen who have exhibited a high level of success in their middle school science/academic assessments. This course requires the students to do additional reading and writing as compared to Biology A/B. Students may be required to do some type of independent research project as part of the Honors requirements. Students taking this course usually follow it with Honor Chemistry and/or Honors Physics. Honors Biology I is a one semester course that introduces you to the world of living things. Students will be exploring basic life processes, interdependence and interactions within the environment, cultural and historical scientific contributions, and current and emerging technologies. Students experience the content of Biology I through an inquiry approach. Using available technology, students investigate the world around them. Biology I will provide students with knowledge, prerequisite skills, and habits of mind needed for living and ethical decision making. This course provides a foundation for advanced biological studies and personal career choices. Students will study
units covering, Chemistry of Life, Cells, Cellular Transport, Cellular Metabolism, Cell Growth and Reproduction, Heredity DNA-RNA-Protein Synthesis, Gene Technology, Biological Evolution, Classification of Organisms, Flow of Matter and Energy, and Ecology. This course has a State End of Course Exam (EOC). This is a year-long course.

Advanced Honors/AP Biology - 2 semesters/2 credits
Grades 10, 11, 12
Prerequisites: Biology I (10th graders require Science Teacher Recommendation)
This is a year-long course, paired with Adv. Honors Biology II, that includes many college biological topics, such as genetics, microbiology, vertebrate and invertebrate zoology, and human physiology, in an advanced laboratory setting. Students cover material equivalent to college freshman biology. Students must sit for the culminating exam to receive additional quality point weighting. This is a year-long course and will be taught on a rotating basis with AP Environmental Science.

## Chemistry I-1 semester/1 credit

Grades 10, 11, 12

## Prerequisites: Biology I and Algebra I

Chemistry I explores the properties of chemical substances. Students investigate the following: Atomic Structure; Matter and Energy; Interactions of Matter; and Properties of Solutions, Acids and Bases. Students explore chemistry through inquiry, hands-on laboratory investigations, individual studies and group activities. The students' experiences in chemistry should enable them to understand the role of chemistry in their lives by investigating substances that occur in nature, and in living organisms and those that are created by humans. Their study includes both qualitative and quantitative descriptions of matter and the changes that matter undergoes.

## Honors Chemistry I-1 semester/1 credit

Grades 10, 11, 12

## Prerequisites: Biology I and Algebra I

Honors Chemistry I consists of the same material as taught in Chemistry I. In Honors Chemistry I each student will be required to complete a special science project and present that project to the other students in the class. This project is required in order to receive credit for Honors Chemistry I.

## Applied Physics - 1 semester/1 credit

Grades 11, 12
Physics deals with the relationship between matter and energy and how they interact. The following major areas will be investigated: Mechanics, Thermodynamics, Wave and Sound, Light and Optics, Electricity and Magnetism, and Atomic and Nuclear Physics. Using available materials and technology, students investigate the above areas using inquiry based learning, hands-on laboratory investigations, observation of demonstrations, individual studies, and group activities. This course affords students the opportunity to apply knowledge and reasoning skills needed for problem solving and ethical decision-making about local and global scientific and technological concerns. This course provides knowledge and experiences needed for advanced studies and personal career choices.

## Physics - 1 semester/ 1 credit

Grades 10, 11, 12

## Prerequisites: Biology I and Algebra I

Physics deals with the relationship between matter and energy and how they interact. The following major areas will be investigated: Mechanics, Thermodynamics, Wave and Sound, Light and Optics, Electricity and Magnetism, and Atomic and Nuclear Physics. Using available materials and technology, students investigate the above areas using inquiry based learning, hands-on laboratory investigations, observation of demonstrations, individual studies, and group activities. This course affords students the opportunity to apply knowledge and reasoning skills needed for problem solving and ethical decision-making about local and global scientific and technological concerns. This course provides knowledge and experiences needed for advanced studies and personal career choices.

Course content is the same as that in the regular physics course. In addition to the state standards, Honors Physics requires the completion of a research project and the submission of a research paper.

## Advanced Honors/AP Physics - 2 semesters/ 2 credits

Grades 11, 12
Prerequisites: Geometry I; concurrent enrollment in Algebra II or upper level math
AP Physics 1 is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Students must sit for the culminating exam to receive additional quality point weighting. This is a year-long course and will be taught on a rotation depending on student requests.

## Applied Physical Science - 1 semester/1 credit

Grades 11, 12
Physical Science explores the relationship between matter and energy. Students investigate the following: Force and Motion, Structure and Properties of Matter, Interactions of Matter, and Energy. Hands-on laboratory investigations, individual studies, and group activities constitute a major portion of the learning experience. Using available technology, students will investigate forces and motion, the chemical and physical properties of matter, the ways in which matter and energy interact within the natural world, and the forms and properties of energy. Conservation of matter and energy is an underlying theme throughout the entire course. Applied Physical Science provides the knowledge and reasoning skills needed for problem solving and ethical decision-making about matters of scientific and technological concern. Applied Physical Science is designed for those students seeking to move onto Applied Physics.

## Environmental Science - 1 semester/1 credit

Grade 9
Environmental science enables students to develop an understanding of the natural environment and the environmental problems the world faces. Students will investigate the following: fundamental ecological principles, human population dynamics, natural resources, energy sources and their use, human interaction with the environment, and personal and civic responsibility. Students explore the content of Environmental Science through inquiry. This science course utilizes group lab field experiences to meet these expectations. Particular emphasis is placed on local environments. Students will develop a basic understanding of ecology as a basis for making ethical decisions and career choices.

## Agriscience - 1 semester/1 credit

## Grade 9

This is a Career \& Technical Education course, please see course description under CTE offerings.

## Advanced Honors Ecology/AP Environmental Science - $\mathbf{2}$ semesters/2 credits <br> Grades 10, 11, 12

## Prerequisites: (10th graders require Science Teacher Recommendation)

AP Environmental Science is a yearlong course, paired with Honors Ecology, which includes topics such as geology, climatology, oceanography, ecology, water and land usage, energy resources, pollution, and ecosystem protection, in a laboratory setting. AP Environmental Science is an interdisciplinary course that appeals to both students with an interest in science and students with an interest in the sociological and political aspects of environmental issues. Students cover materials equivalent to college freshman environmental science. Students must sit for the culminating exam to receive additional quality point weighting. This is a year-long course and will be taught on a rotation with AP Biology.

## Prerequisites: Biology I

Anatomy and Physiology is the study of the body's structures and respective functions at the molecular/biochemical, cellular, tissue, organ, systemic, and organism levels. Students explore the body 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. Students will study anatomical orientation, protection, support, and movement; integration and regulation; transportation; absorption and excretion; and reproduction, growth, and development. $\boldsymbol{A}$ research project including a research paper is required.

Advanced Honors/AP Chemistry - 2 semesters/ $\mathbf{2}$ credits
Grades 11, 12

## Prerequisites: Biology I and Chemistry I

This is a year-long course, paired with Adv. Honors Chemistry II, that provides a more detailed look at the field of chemistry. Chemistry 2 builds on many of the topics covered in Chemistry 1 Honors. AP Chemistry expands into a variety of new topics. The course has a strong math emphasis and labs provide real world connections. Students cover material equivalent to college freshman chemistry. Students must sit for the culminating exam to receive additional quality point weighting. This is a year-long course.

## SOCIAL STUDIES

The Social Studies Department offers courses that encourage a basic understanding of major political and economic institutions and their historical development, as well as a basic factual knowledge of the social and cultural aspects of U.S. and world history. The department also strives to present an introduction to the content and concepts of the social sciences and to give students a grasp of major trends in the contemporary world. Students must pass a Civics Exam and these 4 social studies courses before graduating: World History \& Geography, U.S. History, Economics, and U.S. Government \& Civics. Students may also take several electives in the department.

| Starting with the Class of 2025 | Regular | Honors |
| :---: | :---: | :---: |
| 9th Grade | World History/Geography <br> (1 semester) | AP Human Geography (1 semester) |
| 10th Grade | Available Social Studies Electives Psychology SDC <br> (1 semester) Or <br> TN History <br> (1 semester) Or <br> Appalachian Studies <br> (1 semester) | Available Social Studies Electives <br> AP Psychology <br> (1 semester) <br> Or <br> AP European History <br> (2 semesters) |
| 11th Grade | US History SDC <br> (1 semester) | Honors US History SDC <br> (1 semester) Or <br> AP US History <br> (2 semesters) |
| 12th Grade | US Government AND <br> Business Economics <br> (0.5 semester each) | AP US Government <br> (1 semester) $\underline{\text { AND }}$ <br> Business Economics ( 0.5 semester) |

## Social Studies Course Descriptions

## World History \& Geography - 1 semester/1 credit

Grade 9
This course is an overview of history from the Industrial Revolution to the contemporary world. Appropriate primary source documents will be part of the curriculum.

World History \& Geography (10-12) - 1 semester/1 credit
Grades 10, 11, 12
This course is an overview of history from the Industrial Revolution to the contemporary world. Appropriate primary source documents will be part of the curriculum.

A survey course designed to explore the history of the United States from Reconstruction to the present. Relevant Tennessee connections will be part of the curriculum, as well as appropriate primary source documents.

## Honors U.S. History - 1 semester/1 credit

Grade 11
This honors course is designed to explore the history of the United States from Reconstruction to the present. Relevant Tennessee connections will be part of the curriculum, as well as appropriate primary source documents.

Advanced Honors/AP U.S. History - 2 semesters/ $\mathbf{2}$ credits
Grade 11
U.S. History AP is a college-level course which traces America's past from pre-discovery to post-World War II in an in-depth manner. Students earn high school credit and may earn college credit by taking the Advanced Placement Examination. Discussion/essay format testing is used as well as extensive outside reading, historical and analytical essays, research assignments and debate style discussions. Critical and analytic thinking are an imperative aspect of the course. Students must sit for the culminating exam to receive additional quality point weighting. This is a year-long course.

Business Economics - 9 weeks/ 0.5 credit
Grade 12
This course provides an in-depth study of fundamental concepts, free enterprise trading practices, and the various players in the economic system. Topics include the production, marketing, and distribution of goods and services, as well as the roles of financial institutions, the government, and the individual within the free enterprise system. Students will explore various careers related to the economy. International trade and economics have become an integral part of Business Economics. This class will be paired with $\mathbf{9}$ weeks of US Government \& Civics.

## Personal Finance - 9 weeks/ $\mathbf{0 . 5}$ credit

Grades 10
Personal Finance is a foundational course designed to inform students how individual choices directly influence occupational goals, future earning potential, and long term financial well-being. The standards in this course cover decision-making skills related to goal setting, earning potential, budgeting, saving, borrowing, managing risk, and investing. The course helps students meet the growing complexities of personal financial management and consumer decision making. Standards in this course are aligned with Tennessee Common Core State Standards for English Language Arts \& Literacy in Technical Subjects, Tennessee Common Core State Standards for Mathematics, as well as Tennessee Economics standards. This class will be paired with 9 weeks of Personal Fitness.

## U.S. Government \& Civics $\mathbf{- 9}$ weeks/ $\mathbf{0 . 5}$ credit

Grade 12
This course includes a study of local, state, and federal government. Emphasis is placed on how the government affects our daily lives. Students will be encouraged to become active participants in the democratic process. Relevant Tennessee connections will be part of the curriculum, as well as appropriate primary source documents. This class will be paired with 9 weeks of Business Economics.

AP U.S. Government \& Politics- $\mathbf{1}$ semester/ $\mathbf{1}$ credit
Grade 12
This course provides a college-level introduction to basic political ideas, concepts, policies, institutions, roles, relationships, and behaviors that characterize the constitutional system and political culture of the United States. Students will be expected to move beyond factual recall into critical analysis of the creation, function, and processes of government. Students must sit for the culminating exam to receive additional quality point weighting.

## Social Studies Department Electives

AP European History - 2 semesters/2 credits
Grades 10, 11, 12
This course covers European History from 1450 to the present. It will cover many college historical topics such as intellectual, cultural, political, diplomatic, social and economic history. Students cover material equivalent to college freshman Western Civilization, and it prepares them for the AP Exam. Extensive outside reading, research assignments, and analytical writing will be required. Students must sit for the culminating exam to receive additional quality point weighting. This is a year-long course.

## AP Human Geography - 1 semester/1 credit

Grades 9, 10, 11, 12
This is a one-term course that includes many college geographic topics such as population, culture, political organization, agriculture, industrialization, and urban land use. Students cover material equivalent to college freshman human geography, and it prepares them for the AP Exam. Extensive outside reading, research assignments, and analytical writing will be required. Students must sit for the culminating exam to receive additional quality point weighting. This course will satisfy the World History \& Geography graduation requirement.

## AP Psychology - 1 semester/1 credit

Grades 10, 11, 12
The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. Students must sit for the culminating exam to receive additional quality point weighting.

## Psychology SDC - 1 semester/1 credit

Grades 10, 11, 12
Psychology is a Pre-AP research class where human behavior is studied and discussed. The study of personality, relationships, and career opportunities in mental health fields are all included in this elective course. All students enrolled in a statewide dual credit course take the online challenge exam, which is used to assess mastery of the postsecondary-level learning objectives. Students who meet or exceed the exam 'cut score' receive college credit that can be applied to any Tennessee public postsecondary institution. Exam scores are reported on the high school transcript to ensure postsecondary credit is accurately awarded but are not used in any state accountability measures. Students must sit for the culminating exam to receive additional quality point weighting.

## Sociology - 1 semester/1 credit

Grades 10, 11, 12
Students will explore the ways sociologists view society and how they study the social world. Students will examine culture, socialization, deviance, and the structure and impact of institutions and organizations as well as selected social problems and how change impacts individuals and societies.

## Tennessee History - 1 semester/1 credit

Grades 10, 11, 12
Students will examine the history of Tennessee, including the cultural, geographic, economic, and political influences upon that history. Students will discuss Tennessee's indigenous peoples as well as the arrival of EuroAmerican settlers. Students will analyze and describe the foundation of the state of Tennessee. Students will identify and explain the origins, impact, and aftermath of the Civil War. Students will discuss the rise of a manufacturing economy. Finally, students will examine and discuss the Civil Rights Movement and Tennessee's modern economy and society.

## Appalachian Studies-1 semester/1 credit

Grades 10, 11, 12
The course will provide an overview of the Appalachian Region of the United States, in particular Central and Southern Appalachia. Included in this overview are units of study exploring the history, culture, economy, political systems, and geography of the region. While in the course, students are expected to gain both an understanding and an appreciation of the Appalachian Region.

## FOREIGN LANGUAGE

## Graduation Requirements and College Admittance:

All students are required to have two credits of the same foreign language to graduate. Once admitted to a college or university, most students will be tested for recall of their foreign language and required to take two intermediate courses. Those students who are unable to demonstrate mastery of their foreign language may be required to take two beginner foreign language classes.

## Course Requirements for Foreign Language:

The ability to speak and write are essential in learning a language; listening, pronunciation, spelling, reading, grammar, and memorization are key elements of success in foreign language courses.

Levels I and II introduce students to grammar and vocabulary needed for basic communication. Because Level II builds on the skills learned in Level I, students are recommended to take Levels I and II of foreign language in consecutive semesters.

## Native Speakers:

A Foreign Language is not a graduation requirement for native speakers of languages other than English. These students are welcome to enroll in Foreign Language classes as appropriate, for elective credit.

French I-1 semester/1 credit
Grades 9, 10, 11, 12
Prerequisite: 9th grade students should be concurrently enrolled in Honors English.
Students of this course will develop skills in listening, speaking, reading, and writing of the French language. They will gain an understanding of cultural concepts and basic grammatical structures. Student learning will take place through songs, poems, dialogues, skits, games, and various "hands-on" activities. Emphasis in the first level is placed on listening and speaking skills.

French II-1 semester/1 credit
Grades 9, 10, 11, 12
Prerequisite: 9th grade students should be concurrently enrolled in Honors English.
Students continue to master skills introduced in French I. Student learning will continue using songs, poems, guided conversations and creative projects. Greater use of the target language is incorporated. Emphasis on speaking continues, as greater use of composition is added.

## Spanish I-1 semester/1 credit

Grades 11, 12
This course is an introduction to elementary Spanish vocabulary and fundamental grammar concepts necessary for understanding, speaking, and writing Spanish. There is also a strong emphasis placed on Hispanic cultural awareness. Students are expected to participate in classroom activities in order to begin mastering communication skills. Students will be expected to memorize in order to build skills in this area.

## Spanish II - 1 semester/1 credit

Grades 11, 12
Students continue to master skills such as listening, speaking, reading, and writing in order to communicate in typical cultural situations in a Spanish-speaking community. There is a continued emphasis on cultural awareness in Spanish-speaking countries. Students will be required to do projects, written assignments, and oral presentations.

## PHYSICAL EDUCATION

## 1.5 credits of physical education ( 1 credit in wellness and a half credit in physical education) are required for graduation. PLEASE READ THE FOLLOWING:

- Air Force JROTC I and II may substitute for the Wellness requirement.
- Air Force JROTC III may substitute for the Personal Fitness \& Personal Finance requirements.
- Strength \& Conditioning does not satisfy the Wellness graduation requirement.


## Wellness - 1 semester/1 credit

Grades 9
This course introduces students to the lifelong process of positive lifestyle management that seeks to integrate the emotional, social, intellectual, and physical dimensions of self for a longer, more productive and higher quality of life. Students successfully completing this course will be better prepared to assume responsibilities for personal lifetime wellness.

Personal Fitness - 9 weeks/ 0.5 credit
Grade 10, 11
This 9 week class will be paired with a 9 week 0.5 credit of Personal Finance. Students will improve fitness by learning to participate in a variety of individual exercise activities including power walking, aerobics, stretching/relaxation, Tae-Bo, Tai Chi and strength and conditioning training.

## Physical Education Electives

P.E. II Strength \& Conditioning - 1 semester $/ 1$ credit

Grades 10, 11, 12
Prerequisite: Personal Fitness
Students will improve fitness through intense conditioning activities, plyometrics, agility activities and free-weight strength training.

## Strength \& Conditioning - 1 semester/ 1 credit

Grades 9, 10, 11, 12
Students will be provided an opportunity for development of strength and conditioning for various sports and fitness related activities. Free weights, exercise machines and conditioning activities will be incorporated to promote improvement in strength, endurance, balance, agility, and speed. Student athletes choosing to take this course must remain for the full semester regardless of their sport seas
Team Sports - 1 semester/1 credit
Grades 10, 11, 12

## Prerequisite: Personal Fitness

Students will learn concepts and principles of sports skills through participation in basketball, softball, volleyball, floor hockey, soccer, flag football, and other team sports.

## ACT PREP

ACT Prep-1 semester/ 1 credit
Grades 10, 11, 12
Preparing for the ACT, Postsecondary, and Career
ACT Prep is a class designed for academically-minded college-bound students. Students taking this course must have satisfactory GPA and credit requirements for their grade level. This course is specifically designed to help students improve ACT scores with the use of the online program Score Surge and various other resources. This course should improve students' chances of acceptance into a college or university of their choice. Students will also receive direction in goal preparation and planning as well as college and career research. Students who have previously taken the ACT and wish to improve their scores are also candidates for this class.

## SERVICE LEARNING

Service Learning - 1 semester/1 credit
Grades 11, 12
Prerequisite: Students must be in good academic standing
Service Learning provides high school students with the opportunity to assist in helping other students or HHS faculty/staff. Students in this course will have an opportunity to learn about service by accumulating 30 hours of community service through either after-school service or community-based service outside of the school day. Students will be assigned to a location on campus to assist during the block they are scheduled. Students are required to submit their 30 hours of community service at the end of the semester. Students are placed by approval only.

## STEM ENDORSEMENT \& EDUCATION

Heritage High School is proud to offer integrated, STEM education to our students. Our STEM initiative has resulted in the assembly of several STEM Studios. The term studio describes the unique "school within a school" model used at Heritage to offer STEM education.

Students have the ability to participate in various STEM studios, each having a unique curricular focus. Students within each studio have the ability to pursue classes that use integrated, STEM based instruction particular to their area of interest. As students pursue their coursework, they will have the chance to candidate for official acceptance into the studio of their choice.

Once accepted, students advance through the curriculum in their STEM studio with the goal of completing the requirements for a STEM Endorsement on their diploma. On their journey toward endorsement, students will have the opportunity to conduct original research, participate in mentoring programs, connect with industry and business leaders, collaborate with fellow students, participate in competitive STEM related programs, and engage with the professional community in their respective fields.

The first step in achieving the STEM Endorsement is to complete an approved 6-credit Course Cluster in CTE or Math/Science with a STEM focus. Below you will find approved Programs of Study for the Heritage STEM Studios: Agricultural Science, Applied Math \& Science, Computer Science, Engineering \& Trades, and Health Science. Students should refer to the following pages to find the STEM Studio which applies to them and follow the steps below to ensure they are requesting the correct courses.

1. Once the correct STEM Studio is located, students should then choose a Program of Study within that STEM Studio.
2. Locate the required courses for that Program of Study, which typically will be four courses.
3. Locate the Additional Courses for STEM Endorsement necessary to meet the 6 -credit Course Cluster requirement which will be listed under the courses for the Program of Study. Only choose two if more are available.
4. Locate the Other Required Courses. Each Studio also requires specific courses, unique to that Studio which must be taken in order to earn the STEM Endorsement. All of the STEM Studios require taking the AP Seminar and AP Research course.

Students must maintain a C or better average in ALL classes in order to receive the Endorsement. Students will also need to complete a capstone project in their Program of Study, complete a digital portfolio senior year, and complete 30 hours of documented community service during their four years at Heritage High School.

## Agricultural Science STEM Studio

| Veterinary and Animal Science* | Additional Courses for 6-credit STEM requirement <br> Agriscience LDC <br> Small Animal Science Technologies <br> Large Animal Science Technologies <br> Capstone Supervised Agriculture Experience <br> Human Anatomy \& Physiology <br> Adv. Honors Biology II/AP Biology (2 credits) <br> WBL Vet \& Animal Sc. Career Practicum (up to 2 credits) <br> Agricultural Engineering \& Applied Tech** <br> Principles of Agricultural Mechanics <br> Agricultural Power \& EquipmentAdditional Courses for 6-credit STEM requirement |
| :--- | :--- |
| Capstone Supervised Agriculture Experience <br> Principles of Engineering \& Technology LDC <br> WBL Ag Mechanics Career Practicum (up to 2 credits) |  |

*Other required course(s) - AP Seminar, AP Research, Chemistry
**Other required course(s) - AP Seminar, AP Research, Physics

## Applied Math \& Science STEM Studio

Select a combination of Math and Science courses to complete a 6-credit STEM Course Cluster *must be above and beyond graduation requirements for both Math and Science

## Applied Math*

DE Probability \& Statistics
AP Probability \& Statistics
AP Pre-Calculus
AP Calculus AB
AP Calculus BC

## Applied Science*

Adv. Honors Biology II/AP Biology (2 credits)
Chemistry
Honors Chemistry
Physics
Honors Physics
Adv. Honors Physics/AP Physics (2 credits)
Honors Human Anatomy \& Physiology
Adv. Honors Ecology/AP Env. Science (2 credits)
*Other required course(s) - AP Seminar, AP Research

## Computer Science STEM Studio

| Programming \& Software Development <br> Computer Science Foundations LDC <br> Coding I <br> Coding II | Additional Courses for 6-credit STEM requirement <br> Web Design Foundations <br> Cybersecurity I <br> Cybersecurity II <br> Coding Practicum <br> AP Computer Science Principles <br> WBL Coding Career Practicum |
| :--- | :--- |
| Web Design <br> Computer Science Foundations LDC <br> Web Design Foundations <br> Web Site Development <br> Or AP Computer Science Principles | Additional Courses for 6-credit STEM requirement <br> Coding I <br> Coding II <br> Cybersecurity I <br> Cybersecurity II <br> Web Design Practicum <br> WBL Cybersecurity Career Practicum |
| $\underline{\text { Digital Arts \& Design }}$Digital Arts \& Design I <br> Digital Arts \& Design II <br> Digital Arts \& Design III | Additional Courses for 6-credit STEM requirement |
| Computer Science Foundations LDC <br> Web Design Foundations <br> CyberSecurity I <br> Cybersecurity II <br> Applied Arts Practicum <br> WBL Digital Arts \& Design Career Practicum |  |

*Other required course(s) - AP Seminar, AP Research

## Engineering \& Trades STEM Studio

| Engineering <br> Principles of Engineering \& Technology LDC <br> Engineering Design I <br> Engineering Design II | Additional Courses for 6-credit STEM rqmt. <br> Digital Electronics <br> Robotics and Automated Systems <br> Advanced Honors Physics/AP Physics <br> WBL STEM Career Practicum |
| :--- | :--- |
| Technology <br> Principles of Engineering \& Technology LDC <br> Digital Electronics DE <br> Robotics \& Automated Systems | Additional Courses for 6-credit STEM rqmt. <br> Engineering Design I <br> Engineering Design II <br> Advanced Honors Physics/AP Physics <br> WBL STEM Career Practicum |
| Automotive Maintenance \& Light Repair <br> Maintenance \& Light Repair I <br> Maintenance \& Light Repair II <br> Maintenance \& Light Repair III | Additional Courses for 6-credit STEM rqmt. <br> Principles of Engineering \& Technology LDC <br> Digital Electronics DE <br> Robotics \& Automated Systems <br> WBL Automotive Maintenance \& Light Repair Career <br> Practicum |

*Other required course(s) - AP Seminar, AP Research, \& Physics

## Health Science STEM Studio

| Diagnostic Services | Additional Courses for 6-credit STEM requirement |
| :---: | :---: |
| Health Science Education LDC | Medical Therapeutics |
| Human Anatomy \& Physiology | Emergency Medical Services DE |
| Diagnostic Medicine | Medical Terminology DE |
| Clinical Internship (2 credits) | AP Biology |
| Nursing Services | Additional Courses for 6-credit STEM requirement |
| Health Science Education LDC | Diagnostic Medicine |
| Human Anatomy \& Physiology | Medical Terminology DE |
| Medical Therapeutics | Clinical Internship (2 credits) |
| Nursing Education (2 credits) | AP Biology |
| Emergency Services | Additional Courses for 6-credit STEM requirement |
| Health Science Education LDC | Diagnostic Medicine |
| Human Anatomy \& Physiology | Medical Terminology DE |
| Medical Therapeutics | Clinical Internship (2 credits) |
| Emergency Medical Services DE | Nursing Education (2 credits) <br> AP Biology |
| Sport \& Human Performance | Additional Courses for 6-credit STEM requirement |
| Health Science Education LDC | Diagnostic Medicine |
| Human Anatomy \& Physiology | Medical Terminology DE |
| Rehabilitation Careers | Emergency Medical Services DE |
| Clinical Internship (2 credits) | Nursing Education (2 credits) AP Biology |
| Therapeutic Services | Additional Courses for 6-credit STEM requirement |
| Health Science Education LDC | Diagnostic Medicine |
| Human Anatomy \& Physiology | Medical Terminology DE |
| Medical Therapeutics | Emergency Medical Services DE |
| Clinical Internship (2 credits) | Nursing Education (2 credits) AP Biology |

*Other Required course(s) - AP Seminar, AP Research

## FINE ARTS

The Fine Arts Department at Heritage High School offers courses, which train students to value the arts in their lives, both as consumers and as creative participants. Through their involvement in the Fine Arts program, students develop skills in teamwork, problem solving, communication, and critical thinking. Students are required to have one (1) Fine Arts credit.

## Instrumental Music

## Beginning Band - 1 semester/1 credit

Grades 9, 10, 11, 12
This class is geared towards any Heritage HS student that is interested in learning a band instrument for the first time! Students pick which band instrument they would like to play and go from the rudiments of playing all the way to intermediate proficiency. The class curriculum culminates in a summative performance at a scheduled concert. The opportunity to join Marching Band and/or Concert Band in the following school year is available to all Beginning Band students that pass this class!

## Marching Band - 1 semester/1 credit

Grades 9, 10, 11, 12
The band is designed to encourage development of musical skills, acquainting students with different musical styles and enriching their aesthetic experiences. The students will be expected to march during most of the fall semester and will perform a concert toward the end of the semester. Marching band allows the students to develop positive social relationships and attitudes of cooperation, group loyalty, and group discipline.

## Symphonic Band-1 semester/1 credit

Grades 9, 10, 11, 12
The symphonic band, formerly known as concert band, is designed to encourage development of musical skills, acquainting students with different musical styles and enriching their aesthetic experiences. Concert band also allows the students to develop positive social relationships and attitudes of cooperation, group loyalty, and group discipline. Concert band will perform concerts during the spring semester.

## Wind Ensemble Honors - 1 semester/1 credit

Grades 9, 10, 11, 12
The band is designed to encourage development of musical skills, acquainting students with different musical styles and enriching their aesthetic experiences. Band also allows the students to develop positive social relationships and attitudes of cooperation, group loyalty, and group discipline. Marching Band occurs in the fall term. Concert Band and Wind Ensemble is in the spring.

## Percussion Ensemble - 1 semester/1 credit

Grades 9, 10, 11, 12
The percussion ensemble is designed for students who have studied percussion at the middle school level. The objectives are to study more advanced techniques in the percussion family with respect to mallets, snare, timpani, and auxiliary instruments. Students will study literature from method books, percussion ensemble compositions, and concert band compositions. Students will be expected to perform at spring semester concerts and participate in concert festival. Percussion students must take this class instead of Wind Ensemble and Concert Band.

Solo and Ensemble - 1 semester/1 credit
Grades 10, 11, 12 Instrumental students will focus on individual progress and preparation for College Scholarship auditions and Area Clinic auditions. The class centers around individualized lesson plans for each student to have them progress and master their specific instrument. Students will also play in small groups such as duets, trios, and chamber groups to enhance their individual reading skills and ensemble performance. This class is also open to any students that would like to learn a band instrument for the first time. Individualized lesson plans will be developed so that new students could learn to play an instrument.

Guitar \& String Instruments- 1 semester/1 credit
Grades 9, 10, 11, 12
Required: Fee for foot rest (\$10); Students must have an acoustic guitar to bring to class every day, preferably a classical-style guitar with nylon strings. Students should have a protective case for their guitar and may leave them in the choir room during the school day.
Although we will explore different styles of playing throughout the semester, this class is for beginning-level students who will learn classical style guitar playing. Using www.guitarcurriculum.com we will progress through as many as 9 levels from beginning to advanced. Students will demonstrate their ability to play guitar by ear as well as learn to read music. Students will be tested frequently to demonstrate learned skills.The string instruments portion of this class is geared towards any Heritage HS student that is interested in learning/or further developing skills on a string instrument! Students pick which string instrument they would like to play and go from the rudiments of playing all the way to intermediate proficiency. Students with prior experience will have the opportunity to work on solos and audition music for colleges and honor ensembles. The class curriculum culminates in a summative performance at a scheduled concert!

## Choral Music

## Women's Choir - 1 semester/1 credit <br> Men's Choir - 1 semester/1 credit <br> Required: Fee and/or fundraising to cover materials

Grades 9, 10, 11, 12
Grades 9, 10, 11, 12

These two beginning groups are open to all students, although they are geared toward freshmen and beginning singers. No audition is required, but it is important that each member has a strong interest in music and enjoys singing. In addition to learning different styles of music, a strong emphasis is placed on learning the different elements of music and how to read music from a printed score. Often, students who excel in these groups choose to progress to Concert Choir.

## Concert Choir-1 semester/ 1 credit

Grades 9, 10, 11, 12
Required: Fee and/or fundraising to cover materials
Concert Choir is a non-audition, intermediate-level mixed choir open to any student who has had at least one semester of a choral music class. It is important that each member shows a strong interest in singing and a willingness to work hard. In addition to learning and performing different styles of music, each student will continue development of vocal and sight-reading skills. Students who excel in this group often choose to audition for Heritage Singers.

## Musical I-1 semester/1 credit

Grades 10, 11, 12
This course provides students with an opportunity to engage in, and produce a large scale musical production. Through this production process, students will learn Music Theater vocal techniques, choreography, acting, make-up, costuming, lighting, sound, among so many others. This is a rigorous class with the production being performed in late October / early November. There are no prerequisites
for this class, however due to the fast paced nature of the rehearsal timeline, it is geared toward upperclassmen.

## Heritage Singers Honors - 2 semesters/2 credits

Grades 10, 11, 12
Prerequisite: This class is by audition only. Students must have had at least one semester of choral music experience, must be able to participate in Heritage Singers for BOTH semesters, and must be in good academic standing in order to audition. If any student fails more than one class in either semester, he/she may not audition for the following year. Other requirements, such as letter of recommendation and essay may be obtained during the spring in an audition packet from Mr. Owens. Required: Fee and/or fundraising to cover materials
Heritage Singers is our most advanced ensemble with select voices. Singers are selected by audition during the spring for the following year. This group performs and competes in a variety of settings throughout the year and sings a wide selection of quality choral literature from all periods of music. All students are required to attend ALL performances for a grade. Members MUST be scheduled conscientiously and be able to coordinate work schedules and family activities around performances. Members will be required to purchase either a tuxedo or a dress through the choral department.

Musical/Choral Practicum - 1 semester/1 credit
Grades 10, 11, 12
Required: Heritage Singers or Fall Musical
Production Methods is a service learning class geared toward the production of the major spring musical produced by the Heritage Singers. In this class students will be responsible for the design and creation of set pieces, costumes, make-up guides, lighting, and sound. Students must have prior knowledge of Musical productions from either Heritage Singers or the Fall Musical.

## Music Education

## General Music - 1 semester/1 credit

Grades 9, 10, 11, 12
This course includes a wide variety of topics including musical styles, the history of music, musical instruments, voices, music of different cultures, etc...designed to develop the student's appreciation of music. The students will be involved in writing assignments, listening activities, and video presentations which will help them understand and respect different genres of music.

## Theatre

## Theatre Arts - 1 semester/1 credit

Grades 9, 10, 11, 12
Required: Fee and/or fundraising to cover materials
Open to all students who are curious about theatre, this course includes a basic introduction to theatre, stagecraft, play production, and theatre history. Students will be required to perform during an evening production and will develop basic acting and speaking techniques. This course also offers advanced instruction in all phases of theatre production. Students may choose to act and/or work on a backstage crew. A one-act play will be prepared and presented. A Reader's Theatre monologue will be written and performed, as well. Therefore, five evenings may be required outside of classroom time. Parent volunteers are needed and their participation is welcomed. A positive attitude, responsible behavior, participation, and effort are necessary for successful completion of Theatre Arts.

## Visual Art

Visual Art I-1 semester/1 credit
Grades 9, 10, 11, 12

## Required: Fee and/or fundraising to cover materials

Art I is an introductory survey course for students with little or no previous visual art experience who desire a fine arts credit. The curriculum studied is composed of both academic and studio experiences. Students in this course will gain the basic skills and insights necessary to create drawings that are both accurate and expressive. Students will gain confidence in their own vision and their ability to draw what they see. Students will also be introduced to all of the visual art practices, including drawing, painting, sculpture, printmaking, and mixed media. Students are encouraged to participate in regional exhibits and competitions. The study of art criticism and aesthetics are an integral part of the curriculum.

## Visual Art II - 1 semester/1 credit

Grades 10, 11, 12
Required: Fee and/or fundraising to cover materials; Teacher Recommendation; Visual Art I
Art II is an elective course that continues the same study of principles learned in Art I, but with a stronger studio component. Art I is focused on refining artistic skill while Art II focuses more on the concept behind the artwork. Students will create projects using skills learned in Art I including, but not limited to: drawing, painting, sculpture, printmaking, and mixed media. Students are encouraged to participate in regional exhibits and competitions. The study of art criticism and aesthetics are an integral part of the curriculum.

## Visual Art III- 1 semester/1 credit

Grades 11, 12

## Required: Fee and/or fundraising to cover materials; Teacher Recommendation; Visual Art II

Art III is an advanced art course for students highly motivated and focused on the formulation of a personal interpretive style. The concept of big ideas assumes primary importance in art making because subject matter can serve as the context for exploring the big ideas. Topics are conceptual in nature to encourage in-depth exploration and experimentation in both two-dimensional and three-dimensional art making. Students are given choices of media and are expected to refine artistic skills and to work independently. Students are encouraged to participate in regional exhibits and competitions.

## Painting - 1 semester/1 credit

Grades 10, 11, 12
Prerequisite: Visual Art I
Painting I is an elective course with the same elements and principles learned in Art I, with a stronger concentration on painting and painting techniques. Students will create projects using skills learned in Art 1 and will explore new mediums including Oil painting, acrylic, tempera, and watercolor. Students are encouraged to compete in regional competitions and exhibitions. This course is intended for students who are dedicated to improving their artistic skills and practice.

## Photography-1 semester/1 credit

Grades 9, 10, 11, 12

## Prerequisite: Student must have a digital camera or smartphone with a functional camera.

Requirement: Fee and/or fundraising to cover materials.
Photography is an introductory course for students with little or no photographic experience who desire a fine arts credit. The curriculum studied is composed of both academic and studio experiences. Topics integrate the history of photography, which include the invention of the camera, the 20th Century rise of photography to a Fine Art, and digital photography technology. The course includes an interdisciplinary approach to assist students to develop a personal method to communicate visually through studio experiences that emphasize the design elements and principles for composition, lighting, and a variety of
subject matter. Students are to upload all of their photos to their chromebook so that they can be graded. Professional photographer ethics are incorporated throughout the course. Students are encouraged to participate in regional exhibits and competitions, which incorporate selecting their photographs for printing and matting. The study of art criticism and aesthetics are an integral part of the curriculum.

Digital Arts \& Design I LDC (Local Dual Credit) - 1 semester/1 credit Grades 9, 10, 11, 12 Digital Arts \& Design I is a foundational course in the Arts, A/V Technology, \& Communications cluster 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. In addition, students will begin compiling artifacts for inclusion in a digital portfolio, which they will carry with them throughout the full sequence of courses in this program of study. This course satisfies the Fine Arts graduation requirement. Students may obtain their OSHA 10 Construction Industry credential in this course and have the opportunity to earn Local Dual Credit at PSCC.

Web Design Foundations LDC (Local Dual Credit) - 1 semester/1 credit
Grades 10, 11, 12
Prerequisite: Computer Science Foundations, Algebra I, and co-requisite: Geometry
Web Design Foundations is a course that prepares students with work-related web design skills for advancement into postsecondary education and industry. The course is intended to develop fundamental skills in both theory and practical application of the basic web design and development process, project management and teamwork, troubleshooting and problem solving, and interpersonal skill development. Laboratory facilities and experiences simulate those found in the web design and development industry; where interaction with a "client" is indicated in the standards, it is expected that students' peers or the instructor may serve as mock clients in lieu of an actual relationship with an industry partner. Upon completion of this course, proficient students will be prepared for more advanced coursework in the Web Design program of study. This course satisfies the Fine Arts graduation requirement.

## HUMANITIES

A Humanities Program of Study is any combination of courses in English/Language Arts, World
Languages (above Level 2 if completing University Admissions requirement), and Social Studies, above the core graduation requirements.

## Yearbook - 1 semester/1 credit

## Grades 10, 11, 12

Required: Enrollment by permission of instructor
Students develop skills in electronic publishing design, layout, composition, and past-up. The techniques applied require importing data/graphics using resources such as the Internet, scanner, digital cameras, etc. Students design, write, and produce a computer-based graphic multimedia project. Students must be highly motivated, able to write well, work well with peers, and be responsible in following through with tasks as the work culminates in publications including the school yearbook and other school documents. Students can enroll in Yearbook both semesters.

# GOVERNMENT \& PUBLIC ADMINISTRATION 

Air Force Junior ROTC

The mission of AFJROTC is to "Develop citizens of character, dedicated to serving their nation and community". The goal is to instill in high school cadets the values of citizenship, service to the United States, personal responsibility, and a sense of accomplishment. To enroll in these courses, students must be United States citizens and capable of participating in the complete AFJROTC curriculum, including drill and ceremonies and physical fitness (medical permission form required).

- Program of Study: Students must complete the first three levels of JROTC
- Wellness Requirement Substitution: Air Force JROTC I and II.
- Personal Fitness/Personal Finance Requirement Substitution: Air Force JROTC I, II, and III.


## Air Force JROTC I-1 semester/1 credit

Grades 9, 10, 11, 12
Air Force JROTC studies begin with the study the Aviation History, providing a basic knowledge of the origins and development of today's aerospace world. Leadership Education I include studies in attitude and discipline as they apply to life situations. Students receive training in time management and study skills, drug and alcohol abuse, first aid, and drill and ceremonies. Studies in the development of a life-long wellness program are included to integrate the emotional, social, intellectual, and physical dimensions of self for a longer, more productive and higher quality of life. Uniforms are provided free of charge and students must wear them one day each week. Failure to wear the uniform may result in a failing grade for the course.

## Air Force JROTC II - 1 semester/1 credit

Grades 10, 11, 12

## Prerequisites: Air Force JROTC I; Approval from the department

The course provides an introduction to the aerospace environment, the effects of flight on the human body; and basic aeronautics and navigation. The four units instructed begin with, The Aerospace Environment (weather elements/forecasting and aviation weather), Human Requirements of Flight (physiology of flight, protective clothing/equipment), Principles of Aircraft Flight (scientific principles of flight power) and Principles of Navigation (basic navigation elements, maps, navigation instruments/navigation aids). Leadership Education 2 is a guide to learning the fundamentals of an exciting arena called leadership. The four areas taught are Effective Communications Skills (written reports and public speaking), Understanding Individual Behavior, Understanding Group Behavior, and Basic Leadership concepts. Cadets hold positions of greater responsibility as they plan and carry out unit projects. This course satisfies the Wellness graduation requirement.

## Air Force JROTC III-1 semester/1 credit

Grades 11, 12

## Prerequisites: Air Force JROTC II; Approval from the department

This third-level course is a science course which examines our solar system through an introduction to Exploring Space. We begin our studies with the History of Astronomy, the Earth, the Moon, Survey of the Solar System, Terrestrial planets and the Outer Planets. The Leadership Education 3 component emphasizes life after high school, college preparation, financial management, resumes and interviewing techniques. This course satisfies the Personal Fitness, Personal Finance, and US Government \& Civics graduation requirements.

Air Force JROTC IV - 1 semester/1 credit
Grade 12
Prerequisite: Air Force JROTC III; Approval from the department
These cadets manage the entire cadet corps by practicing communication, decision-making, personal interaction, managerial, and organizational skills they have learned.

## SPECIAL EDUCATION

Special Educational programs are available to students who meet the criteria for an Individualized Educational Program because of disability. A team made up of parents, teachers, the psychologist, the principal, and other support staff meets to create a program based on the student's academic and vocational needs and abilities. Included in the special education program are English and math labs, a self-contained classroom that includes life skills, training and community experiences, and inclusion services which provide assistance within the regular education program. Planning the transition to work, school, or career after graduation is an important aspect of special education services at HHS, and a Vocational Rehabilitation Transition Coordinator is on staff to assist students and parents in that process. For more information about special education services, please contact the Special Education Department at 984-8110 (ext. 2180).

## *All classes require IEP team decision*

## English I Resource - 2 semesters/ $\mathbf{2}$ credits

Grade 9
The fall semester focuses on the development of fundamental reading skills. The spring semester reinforces fundamental reading and writing skills. All strands of the state curriculum are covered with emphasis on literary analysis, paragraphing, and practice of narrative, descriptive, and expository writing. This is a year-long course with a state End of Course exam.

## English II Resource - $\mathbf{2}$ semesters/ $\mathbf{2}$ credits

Grade 10
Sophomore-level strands of the state curriculum continue with more writing, research (use of library tools), and literary analytical skills emphasized. The literature's focus is set to meet student reading levels. This is a year-long course with a state End of Course exam.

English III Resource - 1 semester/1 credit
Grade 11
Junior-level strands of the state curriculum continue with an emphasis in further developing writing skills. The literature's focus is set to meet student reading levels.

Academic Skills ABC - 1 semester/1 credit
Grades 9, 10, 11, 12
This course provides individualized instruction at the student's academic level with an emphasis on behavior and social skills.

## CP Life Skills English - 1 semester/1 credit

Grades 9, 10, 11, 12
The Life Skills English course is designed to improve student skills in the areas of listening, speaking, writing, literature and language appropriate for independent living. These skills include exploring a variety of communication modes, simple forms of writing, and functional reading skills.

Algebra IA/B Resource - 2 semesters/2 credits Grade 9
This course covers simplifying and evaluating equations, work with polynomials, graphing equations and inequalities, and systems of equations and inequalities. This course is designed for students who struggle with math and need more time to master concepts with a reduced pace of instruction. Students earn an
elective credit for the IA semester. The Algebra IB semester includes the state TNReady Exam, near the end of the semester, and is the semester when the math credit is awarded.

Geometry A/B-2 semesters/2 credits
Grade 10

## Prerequisites: Algebra I A/B required

In this course, students use definitions and postulates to solve problems involving lines, angles, triangles, polygons, circles, and trigonometry. The course is designed for students who struggle with math and need more time to master concepts with a reduced pace of instruction. Students earn an elective credit for the A semester. The Geometry B semester includes the state TNReady Exam, near the end of the semester, and is the semester when the math credit is awarded.

Algebra II Resource - 1 semesters/1 credit
Grade 11
Prerequisites: Algebra I $A / B$ required and Geometry preferred
This course covers systems of equations, analyzing functions, radical expressions, graphing, and statistics. The course is designed for students who struggle with math and need more time to master concepts with a reduced pace of instruction. Algebra II includes the state TNReady exam near the end of the semester in which it is taken.

## CP Life Skills Math - 1 semester/1 credit

Grades 9, 10, 11, 12
The Life Skills Math course is designed to provide students with the developmentally appropriate math skills necessary to explore and solve problems in everyday life. Students will develop skills in basic math operations and learn the use of numbers for a variety of scenarios. Technology is utilized to provide support and build skills.

## Biology I A/B Resource - $\mathbf{2}$ semesters/2 credits

Grade 10
This class is designed to introduce students to the basics of life processes, interactions within the environment, and current technologies at a reduced pace of instruction. This course is for students struggling with reading that may need additional time to master biological concepts and vocabulary. The state end of course exam is required during the spring semester. This is a year-long course with a state End of Course exam.

## CP Life Skills I and II - $\mathbf{1}$ semester/1 credit

Grades 9, 10, 11, 12
The Life Skills courses are designed to develop a repertoire of developmentally appropriate social and leisure activities the student can engage in both individually and as a group. Instruction is meaningful, functional, age appropriate and integrated in various community settings (i.e. library, grocery store, restaurant). Activities use naturally occurring materials and situations, and are designed to help students acquire and generalize skills. Students develop and increase social skills to function to the greatest extent possible.

CP Life Skills Transition - 1 semester/1 credit
Grades 9, 10, 11, 12
The Vocational course is designed to prepare students to function at the greatest extent possible in post-secondary life. Students will develop social skills and behavioral expectations, including personal responsibility, communication skills, conflict resolution, personal safety and daily living skills.

CP Life Skills Science- 1 semester/1 credit
Grades 9, 10, 11, 12
The CP Science course is designed to provide students with the developmentally appropriate understanding of biodiversity relevant to everyday life. Students will investigate interactions between living things and their environment and explore the adaptation characteristics that promote survival.

## CAREER \& TECHNICAL EDUCATION (CTE)

Heritage High School boasts a comprehensive curriculum including a wide variety of career and technical education classes designed to assist students in acquiring specific technical skills and developing work habits for the current job market as well as preparing students for college. Most courses are organized as two and three-course "Programs of Study". First year students learn basic theory and skills, while second and third-year students acquire advanced skills in classroom, shop, and lab settings that closely imitate actual work sites. Advanced students may use the Career Practicum and Work-Based Learning program to gain valuable experience at the highest level and in an actual job site. Upon successful completion of career and technical education programs, students will be able to gain employment with entry-level job skills, enter a post-secondary training or apprenticeship program, or enter a technical school, 2-year, or 4 -year college or university for additional training.

Heritage High School has the opportunity to offer numerous CTE courses as Local Dual Credit through Pellissippi State Community College (PSCC) as well as Dual Enrollment opportunities through PSCC, Roane State Community College (RSCC), and the Tennessee College of Applied Technology - Knoxville (TCAT-K). In addition, many courses also offer Industry Credentials recognized by the State of Tennessee.

## ADVANCED MANUFACTURING

Advanced Manufacturing is a critical sector of Tennessee's economy. After several consecutive years of strong job gains, the demand for skilled manufacturing workers shows no sign of slowing. The Advanced Manufacturing career cluster contains four programs of study, Heritage HS offers two of these programs.

All programs of study in the Advanced Manufacturing pathway begin with the Principles of Manufacturing course. All programs of study have level 3 and 4 coursework available in Career Practicum (except Health Science) and Work Based Learning; see page 74 for course descriptions.

## Principles of Manufacturing LDC (Local Dual Credit) - 1 semester/1 credit

Grades 9, 10

## Co-requisites: Algebra I or Geometry

Principles of Manufacturing is designed to provide students with exposure to various occupations and pathways in the Advanced Manufacturing career cluster, such as Machining Technology, Industrial Maintenance Technology, Mechatronics, and Welding. In order to gain a holistic view of the advanced manufacturing industry, students will complete all core standards, as well as standards in two focus areas. Throughout the course, they will develop an understanding of the general steps involved in the manufacturing process and master the essential skills to be an effective team member in a manufacturing production setting. Course content covers basic quality principles and processes, blueprints and schematics, and systems. Upon completion of this course, proficient students will advance from this course with a nuanced understanding of how manufacturing combines design and engineering, materials science, process technology, and quality. Upon completion of the Principles of Manufacturing course, students will be prepared to make an informed decision regarding which Advanced Manufacturing program of study to pursue. Students may obtain their OSHA 10 General Industry credential in this course and have the opportunity to earn Local Dual Credit at PSCC.

## Mechatronics Program of Study

The Mechatronics program of study is designed for students interested in becoming a mechatronics technician, electrical technician, mechanical engineering technician, robotics technician, or mechatronics engineer. Course content focuses on the components of manufacturing systems, collection and analysis of quality data, electronics, mechanics, fluid power systems, computers and control systems, and technical documentation and troubleshooting.

Digital Electronics DE (Dual Enrollment) - 1 semester/1 credit
Grades 10, 11

## Prerequisites: Algebra I and Principles of Manufacturing

Digital Electronics is intended to provide students with an introduction to the basic components of digital electronic systems and equip them with the ability to use these components to design more complex digital systems. Proficient students will be able to (1) describe basic functions of digital components (including gates, flip flops, counters, and other devices upon which larger systems are designed), (2) use these devices as building blocks to design larger, more complex circuits, (3) implement these circuits using programmable devices, and (4) effectively communicate designs and systems. Students develop additional skill in technical documentation when operating and troubleshooting circuits. Upon completion of the Digital Electronics course, proficient students will be able to design a complex digital system and communicate their designs through a variety of media. This is a dual enrollment course provided through Tennessee College of Applied Technology - Knoxville (TCAT-K) that will be offered at the high school site during regular school hours.

Robotics \& Automated Systems - 1 semester/1 credit
Grades 10, 11, 12
Prerequisites: Algebra I, Geometry, Chemistry or Physics, Principles of Manufacturing, and Digital Electronics
Robotics \& Automated Systems is an applied course for students who wish to explore how robots and automated systems are used in industry. Upon completion of this course, proficient students will have an understanding of the historical and current uses of robots and automated systems; programmable circuits, interfacing both inputs and outputs; ethical standards for engineering and technology professions; and testing and maintenance of robots and automated systems. May be replaced with Mechatronics $D E$.

## Mechatronics DE (Dual Enrollment) - 1 semester/1 credit

Grades 10, 11, 12

## Prerequisites:Algebra I, Geometry, Principles of Manufacturing, and Digital Electronics

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. This is a dual enrollment course provided through Tennessee College of Applied Technology - Knoxville (TCAT-K) that will be offered at the high school site during regular school hours. May be replaced with Robotics \& Automated Systems.

## Welding Program of Study

The Welding program of study is designed to prepare and certify students as entry-level welders.

## Welding I DE (Dual Enrollment) - 1 semester/1 credit <br> Grades 10, 11

## Prerequisite: Principles of Manufacturing; Recommended: Algebra I and Geometry

Welding I is designed to provide students with the skills and knowledge to effectively perform cutting and welding applications used in the advanced manufacturing industry. Proficient students will develop proficiency in fundamental safety practices in welding, interpreting drawings, creating computer aided drawings, identifying and using joint designs, efficiently laying out parts for fabrication, basic shielded metal arc welding (SMAW), mechanical and thermal properties of metals, and quality control. Upon completion of this course, proficient students will be able to sit for the AWS SENSE Entry Level Welder certification and will be prepared to undertake more advanced welding coursework. This is a dual enrollment course provided through Tennessee College of Applied Technology - Knoxville (TCAT-K) that will be offered at the high school site during regular school hours.

Welding II DE (Dual Enrollment) - 1 semester/2 credits
Grades 10, 11, 12

## Prerequisites: Algebra I, Geometry, Principles of Manufacturing, and Welding I

Welding II is designed to provide students with opportunities to effectively perform cutting and welding applications of increasingly complexity used in the advanced manufacturing industry. Proficient students will build on the knowledge and skills of the Welding I course and apply them in novel environments, while learning additional welding techniques not covered in previous courses. Specifically, students will be proficient in (1) fundamental safety practices in welding, (2) gas metal arc welding (GMAW), (3) flux cored arc welding (FCAW), (4) gas tungsten arc welding (GTAW), and (5) quality control methods. Upon completion of the Welding II course, proficient students will be eligible to complete the American Welding Society (AWS) Entry Welder or the AWS SENSE Advanced Welders qualifications and certifications. This is a dual enrollment course provided through Tennessee College of Applied Technology - Knoxville (TCAT-K) that will be offered at the high school site during regular school hours.

## AGRICULTURE, FOOD, \& NATURAL RESOURCES

The Agriculture, Food, and Natural Resources (AFNR) career cluster prepares learners for careers in the planning, implementation, production, management, processing, and/or marketing of agricultural commodities and services. This includes food, fiber, wood products, natural resources, horticulture, and other plant and animal products. It also includes related professional, technical, and educational services. Continued globalization of the food, agricultural, and natural resources system will increase opportunities for graduates who understand the socio-economic factors that define international markets. Graduates who know how to satisfy the diverse consumer needs and preferences in different cultures, and who have the language skills to communicate effectively, will have the best opportunities to be employed by the growing number of multinational businesses.

Through the AFNR career cluster, students are provided opportunities for leadership development, personal growth, and career success. Instruction is delivered through the three-circle model including

1. Classroom/Laboratory instruction
2. Supervised Agricultural Experience (SAE) programs
3. Student Leadership (FFA)

All courses in the Agriculture, Food, and Natural Resources pathway begin with the Agriscience course. Other courses available in all Agriculture, Food, and Natural Resource programs of study are listed here. All programs of study have level 3 and 4 coursework available in Career Practicum (except Health Science) and Work Based Learning; see page 74 for course descriptions.

## Agriscience LDC (Local Dual Credit) - $\mathbf{1}$ semester/1 credit

Grades 9, 10
Agriscience is an introductory laboratory science course that prepares students for biology, subsequent science and agriculture courses, and postsecondary study. This course helps students understand the important role that agricultural science and technology plays in the twenty-first century. In addition, it serves as the first course for all programs of study in the Agriculture, Food, \& Natural Resources cluster. Upon completion of this course, proficient students will be prepared for success in more advanced agriculture and science coursework. This course counts as a lab science credit toward graduation requirements. This course counts as a lab science credit toward graduation requirements. Students may obtain their OSHA 10 General Industry credential in this course and have the opportunity to earn Local Dual Credit at PSCC.

## Foundational Supervised Agricultural Experience (SAE) - 1 semester/1 credit <br> Grades 9, 10

Supervised Agricultural Experience (SAE) is the delivery model for Work-Based Learning (WBL) used in approved AFNR programs. It consists of two levels, Foundational and Immersion. Foundational SAE are career generic and focused on career exploration \& planning, personal finance, workplace safety, college and career skills and general agricultural literacy. Foundational SAE meets CTE Career Exploration and Planning expectations. SAEs require a documented formal project plan, accurate recordkeeping, and student supervision. Students may earn 1 credit in Foundational SAE.

Capstone Supervised Agricultural Experience (SAE) - 1 semester/1 credit
Grades 11, 12 Supervised Agricultural Experience (SAE) is the delivery model for Work-Based Learning (WBL) used in approved AFNR programs. It consists of two levels, Foundational and Immersion. Foundational SAE are career generic and focused on career exploration \& planning, personal finance, workplace safety, college and career skills and general agricultural literacy. Foundational SAE meets CTE Career Exploration and Planning expectations. SAEs require a documented formal project plan, accurate recordkeeping, and student supervision. Students may earn up to 2 credits in SAE, but only 1 per year. Students must be in 11th and 12th grade to participate in this course.

# Agricultural, Engineering, Industrial, \& Mechanical Systems Program of Study 

Agriculture, Engineering, Industrial, and Mechanical Systems prepares students for careers or further study in engineering, environmental science, agricultural design and research, agricultural and industrial maintenance, agricultural mechanics. Courses in this program of study address navigation, maintenance, repair, and overhaul of electrical motors, hydraulic systems, and fuel-powered engines. In addition, special emphasis is given to the many modern applications of geographic information systems (GIS) and global positioning systems (GPS) to achieve various agricultural goals, preparing students for immediate application of these skills in a career setting or postsecondary institution.

Principles of Agricultural Mechanics is an intermediate course introducing students to basic skills and knowledge in construction and land management for both rural and urban environments. This course covers topics including project management, basic engine and motor mechanics, land surveying, irrigation and drainage, agricultural structures, and basic metalworking techniques. Upon completion of this course, proficient students will be prepared for more advanced coursework in agricultural mechanics.

## Agricultural Power \& Equipment - 1 semester/1 credit

Grade 10, 11, 12

## Prerequisite: Agriscience and Principles of Agricultural Mechanics

Agricultural Power and Equipment is an applied course in agricultural engineering with special emphasis on laboratory activities involving small engines, tractors, and agricultural equipment. The standards in this course address navigation, maintenance, repair, and overhaul of electrical motors, hydraulic systems, and fuel powered engines as well as exploration of a wide range of careers in agricultural mechanics. Upon completion of this course, proficient students will be able to pursue advanced training in agricultural engineering and related fields at a postsecondary institution.

## Veterinary and Animal Science Program of Study

Veterinary and Animal Science is designed for students interested in learning more about becoming a veterinarian, vet tech, vet assistant, or pursuing a variety of scientific, health, or agriculture professions. In this program of study, course content covers such topics and skills as principles of health and disease, basic animal care and nursing, clinical and laboratory procedures, and the anatomical/physiological systems of a range of small and large animals. Upon completion of this POS, students will be prepared to pursue further study in the veterinary and animal sciences at the postsecondary level.

## Small Animal Science Technologies - 1 semester/1 credit

Grades 10, 11

## Prerequisite: Agriscience

Small Animal Science Technologies is an intermediate course in animal science and care for students interested in learning more about becoming a veterinarian, vet tech, vet assistant, or pursuing a variety of scientific, health, or agriculture professions. This course covers the anatomy and physiological systems of different groups of small animals, as well as careers, leadership, and history of the industry. Upon completion of this course, proficient students will be prepared for more advanced coursework in veterinary and animal science.

## Large Animal Science - 1 semester/1 credit

Grades 11, 12

## Prerequisite: Agriscience and Small Animal Science Technologies

Large Animal Science Technologies is an applied course in veterinary and animal science for students interested in learning more about becoming a veterinarian, vet tech, vet assistant, or pursuing a variety of scientific, health, or agriculture professions. This course covers the anatomy and physiological systems of different groups of large animals, as well as careers, leadership, and history of the industry. Upon completion of this course, proficient students will be prepared for success in the level-four Veterinary Science course and further postsecondary training.

## ARCHITECTURE \& CONSTRUCTION

The Architecture \& Construction career cluster prepares learners for careers in designing, planning, managing, building and maintaining the environment. People employed in this cluster work on new
structures, restorations, additions, alterations and repairs. Construction comprises one of the largest industries in the United States. In the next few years, new jobs will be added, and many employment opportunities will result from the need to replace experienced workers who leave the career.

All programs of study have level 3 and 4 coursework available in Career Practicum (except Health Science) and Work Based Learning; see page 74 for course descriptions.

## Residential \& Commercial Construction Program of Study

## Fundamentals of Construction LDC (Local Dual Credit) - 1 semester/ 1 credit <br> Grades 9, 10

Fundamentals of Construction is a foundational course in the Architecture \& Construction cluster covering essential knowledge, skills, and concepts required for careers in construction. Upon completion of this course, proficient students will be able to describe various construction fields and outline the steps necessary to advance in specific construction careers. Students will be able to employ tools safely and interpret construction drawings to complete projects demonstrating proper measurement and application of mathematical concepts. Standards in this course also include an overview of the construction industry and an introduction to building systems and materials. Students will begin compiling artifacts for inclusion in their portfolios, which they will carry with them throughout the full sequence of courses in their selected program of study. Students may obtain their OSHA 10 Construction Industry credential in this course and have the opportunity to earn Local Dual Credit at PSCC.

## Residential \& Commercial Construction I DE - 1 semester/1 or credits

Grades 10, 11

## Prerequisite: Fundamentals of Construction

Residential \& Commercial Construction I is the second course in the Residential \& Commercial Construction program of study intended to prepare students for careers in construction by developing an understanding of the different phases of a construction project from start to finish. Upon completion of this course, proficient students will be able to demonstrate knowledge and skill in the earlier phases of building construction, including site layout, foundation systems, concrete, framing systems, and electrical systems. Students will be able to perform concrete work; frame walls, ceilings, and floors of a structure; and install proper wiring while safely employing tools and interpreting construction drawings to complete projects. Emphasis is placed on demonstrating proper measurement and application of mathematical concepts. Standards in this course also include principles of the construction industry and business and project management. Students will continue compiling artifacts for inclusion in their portfolios, which they will carry with them throughout the full sequence of courses in this program of study. This is a dual enrollment course provided through Tennessee College of Applied Technology - Knoxville (TCAT-K) that will be offered at the high school site during regular school hours.

Residential \& Commercial Construction II DE - 1 semester/1 or 2 credits
Grades 10, 11, 12

## Prerequisites: Fundamentals of Construction and Residential \& Commercial Construction I

Residential \& Commercial Construction II is the third course in the Residential \& Commercial Construction program of study intended to prepare students for careers in construction by developing an understanding of the different phases of a construction project from start to finish. Upon completion of this course, proficient students will be able to demonstrate knowledge and skill in the later phases of building construction including roofing systems, exterior finishing, stair framing systems, masonry systems, and plumbing systems. Students will be able to perform masonry work; frame roofs; install shingles on roofs; apply exterior finishes; and install proper piping for plumbing systems while safely employing tools and interpreting construction drawings to complete projects. Emphasis is placed on demonstrating proper measurement and application of mathematical concepts. Standards in this course also include an introduction to heating, ventilation, and air conditioning systems, principles of the
construction industry, and business and project management. Students will continue compiling artifacts for inclusion in their portfolios, which they will carry with them throughout the full sequence of courses in this program of study. This is a dual enrollment course provided through Tennessee College of Applied Technology - Knoxville (TCAT-K) that will be offered at the high school site during regular school hours.


#### Abstract

ARTS, A/V TECHNOLOGY, \& COMMUNICATIONS Individuals that work in the AV communications industry manufacture, sell, rent, design, install, integrate, operate, and repair the equipment of audiovisual communications. They are involved in the presentation of sound, video, and data to groups in such venues as corporate boardrooms, hotels, convention centers, classrooms, theme parks, stadiums, and museums. The major activity sectors in the AV communications industry are distributive service firms (AV dealers, rental companies, consultants, designers, and related firms), manufacturers of AV presentations and communications products, and large end-users. Most observers expect the job growth rate within $A V$ industries to be at $20-30$ percent for the foreseeable future. In just the AV systems technician field, the industry could expect to add 20,600 jobs annually.


All programs of study have level 3 and 4 coursework available in Career Practicum (except Health Science) and Work Based Learning; see page 74 for course descriptions.

## Digital Arts \& Design Program of Study

## Digital Arts \& Design I LDC (Local Dual Credit) - 1 semester/1 credit

Grades 9, 10
Digital Arts \& Design I is a foundational course in the Arts, A/V Technology, \& Communications cluster 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. In addition, students will begin compiling artifacts for inclusion in a digital portfolio, which they will carry with them throughout the full sequence of courses in this program of study. This course satisfies the Fine Arts graduation requirement. Students may obtain their OSHA 10 Construction Industry credential in this course and have the opportunity to earn Local Dual Credit at PSCC.

## Digital Arts \& Design II - 1 semester/1 credit

Grades 10, 11

## Prerequisite: Digital Arts \& Design I

Digital Arts \& Design II is a course that builds on the basic principles and 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. In addition, students will continue compiling artifacts for inclusion in a digital portfolio, which they will carry with them throughout the full sequence of courses in this program of study.

## Digital Arts \& Design III - 1 semester/1 credit

Grades 10, 11, 12
Prerequisites: Digital Arts \& Design I and II
Digital Arts \& Design III 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. In addition, students will continue compiling artifacts for inclusion in a digital portfolio, which they will carry with them throughout the full sequence of courses in this program of study.

## Audio/Visual Production Program of Study

A/V Production I LDC (Local Dual Credit) - 1 semester/1 credit
Grades 9, 10
A/V Production I is a foundational course in the Arts, A/V Technology, \& Communications cluster for students interested in A/V (audio/visual) production occupations. Upon completion of this course, proficient students will be able 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, basic audio equipment, and other production equipment. Standards in this course include career exploration, an overview of the history and evolution of A/V production, and legal issues affecting A/V production. In addition, students will begin compiling artifacts for inclusion in a portfolio, which they will carry with them throughout the full sequence of courses in this program of study. Students may obtain their OSHA 10 Construction Industry credential in this course and have the opportunity to earn Local Dual Credit at PSCC.

A/V Production II - 1 semester/1 credit
Grades 10, 11
Prerequisites: A/V Production I
A/V Production II is the second course in the A/V Production program of study intended to prepare students for careers in audio/visual production. Building on knowledge acquired in A/V Production I, this course advances technical skill in utilizing industry equipment related to lighting and audio, and it places special emphasis on the 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 $\mathrm{A} / \mathrm{V}$ production businesses, such as ethical and legal issues, technology, funding, and the organization of professional roles in various industries. Students will continue compiling artifacts for inclusion in their portfolios, which they will carry with them throughout the full sequence of courses in this program of study.

## A/V Production III- 1 semester/1 credit

Grades 10, 11, 12
Prerequisites: A/V Production I and II
A/V Production III is an applied-knowledge course intended to prepare students to pursue careers and postsecondary learning in audio/visual 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, with the option of participating in a work-based learning experience for additional credit. 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. Students will continue compiling artifacts for inclusion in their portfolios, which they will carry with them throughout the full sequence of courses in this program of study. Upon completion of this course, proficient students will be prepared for a career in audio/visual production or to transition to a postsecondary program for further study.

## BUSINESS MANAGEMENT \& ADMINISTRATION

The Business Management and Administration career cluster prepares learners for careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations. Career opportunities are available in every sector of the economy and require specific skills in organization, time management, customer service, and communication.

All programs of study have level 3 and 4 coursework available in Career Practicum (except Health Science) and Work Based Learning; see page 74 for course descriptions.

## Business Management Program of Study

Introduction to Business \& Marketing LDC (Local Dual Credit) - 1 semester/1 credit Grades 9, 10 Introduction to Business and Marketing is an introductory course designed to give students an overview of the Business Management and Administration, Marketing, and Finance career clusters. The course helps students prepare for the growing complexities of the business world by examining basic principles of business, marketing, and finance in addition to exploring key aspects of leadership, ethical and social responsibilities, and careers. Students' academic skills in communications, mathematics, and economics are reinforced with activities modeled in the context of business topics. Upon completion of this course, proficient students will be equipped with the foundational skills to succeed in any of the Business, Marketing, or Finance programs of study and will be prepared to make an informed decision regarding which pathways they would like to pursue in high school. Students may obtain their OSHA 10 Construction Industry credential in this course and have the opportunity to earn Local Dual Credit at PSCC.

## Business Communications - 1 semester/1 credit

Grades 10, 11

## Prerequisite: Introduction to Business \& Marketing

Business Communications is a course designed to develop students' effective oral and electronic business communications skills. This course develops skills in multiple methods of communications, including social media, as well as electronic publishing, design, layout, composition, and video conferencing. Upon completion of this course, proficient students will be able to demonstrate successful styles and methods for professional business communications using the proper tools to deliver effective publications and presentations. May be replaced with Accounting I.

## Accounting I-1 semester/1 credit

Grades 10, 11

## Prerequisites: Introduction to Business \& Marketing

Accounting I is an essential course for students who wish to pursue careers in business and finance, or for those who wish to develop important skillsets related to financial literacy. Whether students aspire to be future business owners or work in the finance industry, accounting skills prepare students to succeed in various fields. In this course, students learn to analyze business transactions and financial statements, conduct financial analyses, and journalize, post, and prepare worksheets. Additionally, students discover the ethical considerations of accounting professionals and the standards of practice governing their work, such as the GAAP (Generally Accepted Accounting Procedures) standards. This course prepares students to apply their accounting skills in advanced business and finance courses and ultimately pursue postsecondary training. May be replaced with Business Communications.

## Business Management - 1 semester/1 credit

Grades 10, 11, 12
Prerequisite: Intro to Business and Marketing
Business Management focuses on the development of the planning, organizing, leading, and controlling functions required for the production and delivery of goods and services. This applied knowledge course addresses the management role of utilizing the businesses' resources of employees, equipment, and capital to achieve an organization's goals. Students will participate in a continuing project throughout the course in which, individually or in teams, they will present recommendations to improve an existing business. Local business partnerships are encouraged to provide resources for faculty and students. Upon completion of this course, proficient students will be able to complete a full review of an existing business and offer recommendations for improvement as would a management consultant. This course satisfies the Personal Finance graduation requirement.

## EDUCATION \& TRAINING

The Education and Training career cluster prepares learners for postsecondary credentials and careers as educators, administrators, trainers, counselors, and other related learning support services. This career cluster provides opportunities within three programs of study: Early Childhood Education Careers, Educational Therapy and Support, and Teaching as a Profession. Within all three programs of study that prepare students for postsecondary credentials and careers in Education and Training services, learners will study and demonstrate components of instruction, teaching strategies, types of assessment, student learning, special populations, educational technology, classroom management, lesson planning, professionalism, human development, and more. With an increased focus in the development of effective teachers, equity and equality, and the growing percentage of educator services needed in careers, the importance of "Grow Your Own" educators in school districts has become a vital discussion topic. The programs of study in the Education and Training career cluster can help districts fill the educator gaps. I

All programs of study have level 3 and 4 coursework available in Career Practicum (except Health Science) and Work Based Learning; see page 74 for course descriptions.

## Teaching as a Profession (K-12) Program of Study

Teaching as a Profession is designed for students interested in becoming an educator. In this program of study, course content covers the components of instruction, teaching strategies, types of assessments, student learning, special populations, educational technology, classroom management, lesson planning, professionalism, and more. Upon completion of this POS, students will have participated in an internship placement and built a professional portfolio in preparation for advanced training as future educators at the postsecondary level.

## Introduction to Teaching as a Profession LDC (Local Dual Credit) - 1 semester/1 credit Grades 9, 10

 Introduction to Teaching as a Profession is a foundational course in the Teaching as a Profession program of study for students interested in learning more about becoming a teacher, school counselor, trainer, librarian, or speech-language pathologist. Upon completion of this course, proficient students will gain knowledge in the history of education in the United States, careers in education, and the influence of human development on learning. Artifacts will be created for inclusion in a portfolio, which will continue throughout the full sequence of courses. Students may obtain their OSHA 10 Construction Industry credential in this course and have the opportunity to earn Local Dual Credit at PSCC.
## Teaching as a Profession I-1 semester/1 credit

Grades 10, 11

## Prerequisite: Introduction to Teaching as a Profession

Teaching as a Profession I (TAP I) is an intermediate course for students interested in learning more about becoming a teacher, school counselor, trainer, librarian, or speech-language pathologist. This course covers the components of instruction, teaching strategies, types of assessments, student learning, special populations, and educational technology. Students will conduct observations of educators at work and create artifacts for a course portfolio, which will continue with them throughout the program of study. Upon completion of this course, proficient students will have a fundamental understanding of instructional strategies needed for becoming an educator.

Teaching as a Profession II DE (Dual Enrollment)- 1 semester/1 credit
Grades 11, 12
Required: Intro to Teaching as a Profession, Teaching as a Profession I, and GPA of 2.0 or higher
Teaching as a Profession II (TAP II) is an applied-knowledge course for students interested in learning more about becoming a teacher, school counselor, trainer, librarian, or speech-language pathologist. This course covers classroom management, concepts of higher order thinking, scaffolding instruction, and strategies of effective classroom planning. Students in this course will demonstrate their skills in laboratory settings while building a course portfolio of work, which will carry with them throughout the program of study. Upon completion of this course, proficient students will be prepared to further their studies at the postsecondary level.

## FINANCE

The Finance career cluster prepares learners for careers in financial and investment planning, banking, insurance, and business financial management. Career opportunities are available in every sector of the economy and require specific skills in organization, time management, customer service, and communication. The finance industry is projected to increase by 10 percent by 2026. Globalization, a growing economy, and a complex tax and regulatory environment are expected to continue to lead to strong demand for accountants and auditors.

All programs of study have level 3 and 4 coursework available in Career Practicum (except Health Science) and Work Based Learning; see page 74 for course descriptions.

## Banking \& Finance Program of Study

Introduction to Business \& Marketing LDC (Local Dual Credit) - 1 semester/1 credit Grades 9, 10 Introduction to Business and Marketing is an introductory course designed to give students an overview of the Business Management and Administration, Marketing, and Finance career clusters. The course helps students prepare for the growing complexities of the business world by examining basic principles of business, marketing, and finance in addition to exploring key aspects of leadership, ethical and social responsibilities, and careers. Students' academic skills in communications, mathematics, and economics are reinforced with activities modeled in the context of business topics. Upon completion of this course, proficient students will be equipped with the foundational skills to succeed in any of the Business, Marketing, or Finance programs of study and will be prepared to make an informed decision regarding which pathways they would like to pursue in high school. Students may obtain their OSHA 10 Construction Industry credential in this course and have the opportunity to earn Local Dual Credit at PSCC.

## Accounting I-1 semester/1 credit

Grades 10, 11

## Prerequisites: Introduction to Business \& Marketing

Accounting I is an essential course for students who wish to pursue careers in business and finance, or for those who wish to develop important skillsets related to financial literacy. Whether students aspire to be future business owners or work in the finance industry, accounting skills prepare students to succeed in various fields. In this course, students learn to analyze business transactions and financial statements, conduct financial analyses, and journalize, post, and prepare worksheets. Additionally, students discover the ethical considerations of accounting professionals and the standards of practice governing their work, such as the GAAP (Generally Accepted Accounting Procedures) standards. This course prepares students to apply their accounting skills in advanced business and finance courses and ultimately pursue postsecondary training.

## Banking \& Finance - 1 semester/ $\mathbf{1}$ credit

Grades 10, 11, 12

## Prerequisites: Intro to Business \& Marketing and Accounting I

Banking and Finance presents students with real-world banking and financial situations through a partnership with a local financial institution. This business partnership should provide resources for faculty and students, including, for example, mentors, seminars, and hands-on experience with day-to-day banking operations. 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.

## HEALTH SCIENCE

The Health Science career cluster represents one of the largest industries in the country, with more than 11 million jobs available. The health science industry includes establishments ranging from small-town private practice physicians who employ only one medical assistant to busy inner city hospitals that provide thousands of diverse jobs. More than half of all non-hospital health service establishments employ fewer than five workers. On the other hand, almost two-thirds of hospital employees were in establishments with more than 1,000 workers.

All courses in the Health Science pathway begin with the Health Science Education and Human Anatomy \& Physiology courses. The Medical Terminology course is available for elective credit in all Health Science programs of study, this course does not satisfy the program completion 3rd course. All programs of study have level 3 and 4 coursework available in Career Practicum (except Health Science) and Work Based Learning; see page 74 for course descriptions.

## Health Science Education LDC (Local Dual Credit) - 1 semester/1 credit

Grades 9, 10
Health Science Education is an introductory course designed to prepare students to pursue careers in the fields of public health, therapeutics, health services administration, diagnostics, and support services. Upon completion of this course, a proficient student will be able to identify careers in these fields, compare and contrast the features of healthcare systems, explain the legal and ethical ramifications of the healthcare setting, and begin to perform foundational health care skills. This course will serve as a strong foundation for all of the Health Science programs of study as well as the Health Services Administration program of study. Students may obtain their OSHA 10 General Industry credential in this course and have the opportunity to earn Local Dual Credit at PSCC.

Anatomy and Physiology is designed to develop an understanding of the structures and functions of the human body, while relating those to knowledge and skills associated with pathophysiology. Upon completion of this course, proficient students will be able to (1) apply the gross anatomy from earlier courses to a deeper understanding of all body systems, (2) identify the organs and structures of the support and movement systems, (3) relate the structure and function of the communication, control, and integration system, and (4) demonstrate a professional, working understanding of the transportation, respiration, excretory, and reproduction systems. This course satisfies the Lab Science graduation requirement.

Medical Terminology DE (Dual Enrollment) - 1 semester/1 credit
Grades 11, 12
Prerequisite: Health Science Education, Must be 17 years old.
This course will provide knowledge of ways to document individual care in the home, hospital, long term care, outpatient and others. Careers could include medical records, health management, risk management, unit coordinator, computer operator, social worker, patient advocate, hospital chaplain, clinical department director, community services specialist, computer security specialist, data analyst, health writer, medical librarian, medical video producer and others. This course is taught as Dual Enrollment with Roane State Community College (RSCC). Course planned to be offered in 2024-25, but will not be available in 2025-26.

## Diagnostic Services Program of Study

## Diagnostic Medicine - 1 semester/1 credit

Grades 10, 11, 12

## Prerequisite: Health Science Education and Human Anatomy \& Physiology

Diagnostic Medicine is a second or third level course designed to prepare students to pursue careers in the fields of diagnostic medical imaging, medical laboratory testing, optometry, and other patient diagnostic procedures. Upon completion of this course, proficient students will be able to describe new and evolving diagnostic technologies, compare and contrast the features of healthcare systems, explain the legal and ethical ramifications of the healthcare setting, and begin to perform foundational healthcare skills. In addition, students will continue to add artifacts to a portfolio, which they will continue to build throughout the program of study. Course offered in 2023-24, but planned to not be available in 2024-25.

Clinical Internship - 1 semester/ 2 credits
Grade 11, 12
Prerequisite: Health Science Education, Human Anatomy \& Physiology, Diagnostic Medicine, Medical Therapeutics, Rehabilitation Careers, and 2.0 GPA or better in all health courses
Required: Application (Semester before semester to be taken), Teacher Recommendation, Minimum age 16, CPR-BLS certified, health insurance (per State requirement), UTD on Vaccinations, Physical within last year. Clinical Internship is a capstone course and work-based learning experience designed to provide students with real-world application of skills and knowledge obtained in a prerequisite Health Science course. Upon completion of this course, proficient students will be able to pursue certification in the pre-requisite course of Cardiovascular Services, Exercise Physiology, Medical Therapeutics or Pharmacological Science. Prior to beginning work at a clinical site, students must be certified in Basic Life Support (BLS) Cardiopulmonary Resuscitation (CPR), and deemed competent in basic first aid, body mechanics, Standard Precaution guidelines, and confidentiality.

## Emergency Services Program of Study

## Medical Therapeutics - 1 semester/1 credit

Grades 10, 11, 12

## Prerequisite: Health Science Education and Human Anatomy \& Physiology

Medical Therapeutics is an applied course designed to prepare students to pursue careers in therapeutic and nursing services. Upon completion of this course, a proficient student will be able to identify careers in therapeutics services; assess, monitor, evaluate, and report patient/client health status; and identify the purpose and components of treatments.

Emergency Services I DE (Dual Enrollment) - 1 semester/1 credit Grades 11, 12
Prerequisite: Health Science Education and Human Anatomy \& Physiology, Medical Therapeutics, Required: 17 years old before the course concludes.
Emergency Medical Services is a capstone course in the Emergency Medical Services program of study and is designed to prepare students to pursue careers in the fields of emergency medicine. Upon completion of this course, proficient students will be able to: identify careers and features of the EMS system; define the importance of workforce safety and wellness; maintain legal and ethical guidelines; correlate anatomy and physiology concepts to the patient with a medical or traumatic injury; and perform EMS skills with a high level of proficiency. If taught by an EMT instructor, students will be given the opportunity to sit for the National Emergency Medical Responder certification. In addition, students will continue to add artifacts to a portfolio, which they will continue to build throughout the program of study. Each standard presumes that the expected knowledge and behaviors are within the scope of practice for that EMS licensure level, as defined by the National EMS Scope of Practice Model. Each competency applies to patients of all ages, unless a specific age group is identified. The standards also presume there is a progression in practice from the Emergency Medical Responder level to the Paramedic level. The descriptors used to illustrate the increasing complexity of knowledge and behaviors through the progression of licensure levels originate, in part, from the National EMS Scope of Practice Model. Note: If this course is taught for EMR certification, the program must be approved by the TN Department of Health, Office of Emergency Medical Services. The student to teacher ratio for this course is 12:1. Students enrolled in this course must be 17 years old before the course concludes. This course is taught with an EMT instructor, students will be given the opportunity to sit for the National Emergency Medical Responder certification and as Dual Enrollment with Roane State Community College (RSCC).

## Nursing Services Program of Study

## Medical Therapeutics - 1 semester/1 credit

Grades 10, 11, 12

## Prerequisite: Health Science Education and Human Anatomy \& Physiology

Medical Therapeutics is an applied course designed to prepare students to pursue careers in therapeutic and nursing services. Upon completion of this course, a proficient student will be able to identify careers in therapeutics services; assess, monitor, evaluate, and report patient/client health status; and identify the purpose and components of treatments.

Nursing Education - 1 semester/ 2 credits
Grade 12
Prerequisite: Health Science Education, Human Anatomy \& Physiology, and Medical Therapeutics
Required: Application and Teacher Recommendation. Nursing Education is a capstone course designed to prepare students to pursue careers in the field of nursing. Upon completion of this course, a proficient student will be able to implement communication and interpersonal skills, maintain residents' rights and independence, provide care safely, prevent emergency situations, prevent infection through infection control, and perform the skills required of a nursing assistant. At the conclusion of this course students may sit for the Certified Patient Care Technician (CPCT) exam, or if students have logged 40 hours of classroom instruction and 20 hours of classroom clinical instruction, and if they have completed 40 hours
of site-based clinical with at least 24 of those hours spent in a long-term care facility through a Department of Health approved program, they are eligible to take the certification examination as a Certified Nursing Assistant (CNA). Prior to beginning work at a clinical site, students must be certified in Basic Life Support (BLS) Cardiopulmonary Resuscitation (CPR), and deemed competent in basic first aid, body mechanics, Standard Precaution guidelines, and confidentiality. Students are eligible to take the certification examination as a Certified Nursing Assistant (CNA). Due to state requirements, class size is limited to 15.

## Sport \& Human Performance Program of Study

## Rehabilitation Careers - 1 semester/1 credit

Grades 10, 11
Prerequisite: Health Science Education and Human Anatomy \& Physiology
Rehabilitation Careers is an applied course designed to prepare students to pursue careers in rehabilitation services. Upon completion of this course, a proficient student will be able to identify careers in rehabilitation services, recognize diseases, disorders or injuries related to rehabilitation services and correlate the related anatomy and physiology then develop a plan of treatment with appropriate modalities.

Clinical Internship - 1 semester/2 credits
Grade 11, 12
Prerequisite: Health Science Education, Human Anatomy \& Physiology, Diagnostic Medicine, Medical Therapeutics, Rehabilitation Careers, and 2.0 GPA or better in all health courses
Required: Application (Semester before semester to be taken), Teacher Recommendation, Minimum age 16, CPR-BLS certified, health insurance (per State requirement), UTD on Vaccinations, Physical within last year. Clinical Internship is a capstone course and work-based learning experience designed to provide students with real-world application of skills and knowledge obtained in a prerequisite Health Science course. Upon completion of this course, proficient students will be able to pursue certification in the pre-requisite course of Cardiovascular Services, Exercise Physiology, Medical Therapeutics or Pharmacological Science. Prior to beginning work at a clinical site, students must be certified in Basic Life Support (BLS) Cardiopulmonary Resuscitation (CPR), and deemed competent in basic first aid, body mechanics, Standard Precaution guidelines, and confidentiality.

## Therapeutic Services Program of Study

Medical Therapeutics - 1 semester/1 credit
Grades 10, 11, 12

## Prerequisite: Health Science Education and Human Anatomy \& Physiology

Medical Therapeutics is an applied course designed to prepare students to pursue careers in therapeutic and nursing services. Upon completion of this course, a proficient student will be able to identify careers in therapeutics services; assess, monitor, evaluate, and report patient/client health status; and identify the purpose and components of treatments.

Medical Assisting-1 semester/1 credit
Grades 10, 11, 12
Prerequisite: Health Science Education and Human Anatomy \& Physiology
Medical Assisting is a level 3 course designed to prepare students to pursue careers in medical assisting. Upon completion of this course, a proficient student will be able to implement communication and interpersonal skills, provide care safely, prevent emergency situations, prevent infection through infection control, and perform the skills required of a medical assistant. At the conclusion of this course and an appropriate clinical internship, students may sit for the Certified Clinical Medical Assistant (CCMA) exam. Course planned to be offered in 2025-26, but will not be available in 2024-25.

## HOSPITALITY \& TOURISM

The Hospitality and Tourism career cluster prepares learners for postsecondary credentials and careers in the management and operations of lodging, food services, attractions, recreation and event planning, and other travel-related services. This career cluster includes two programs of study: Culinary Arts and Hospitality and Tourism Management. Beginning salaries depend on the employee's skills, education, and job level at a hotel, restaurant, tourism office, recreation facility, amusement park, or attraction site. Salaries range from entry level wages to six figures. This industry is known for being promoted from within, for its large number of young managers, and the ability to travel and move nationally and internationally.
All programs of study have level 3 and 4 coursework available in Career Practicum (except Health Science) and Work Based Learning; see page 74 for course descriptions.

## Culinary Arts Program of Study

## Culinary Arts I-1 semester/1 credit

Grades 9, 10
Culinary Arts I equips students with the foundational knowledge and skills to pursue careers in the culinary field as competent entry-level quick service and fast-food employees. Throughout the course, students will gain experience in commercial food production and service operations, while preparing for further training in the culinary arts program of study at the secondary and postsecondary levels. Upon completion of this course, proficient students will know the components of commercial kitchen safety and sanitation, history of the foodservice industry, hospitality careers, nutritional concepts, recipe basics, proper kitchen tools and equipment, and kitchen staples. Students will create artifacts to include in a portfolio that they will maintain throughout the course sequence. The course should also include a suggested 30 hours in a commercial kitchen laboratory.

## Culinary Arts II - 1 semester/1 credit

Grades 10, 11
Prerequisite: Culinary Arts I
Culinary Arts II is an applied-knowledge course to prepare students for careers in the culinary field as a prep cook, line cook, catering assistant, and many other entry-level food and beverage occupations. Students will gain experience in commercial food production and service operations, while preparing for further training in the culinary arts program of study at the secondary and postsecondary levels. Upon completion of this course, proficient students will have a working knowledge of commercial kitchen safety and sanitation, menu planning, food presentation, purchasing and inventory, cooking principles, and food preparation. Students will create artifacts to include in their portfolios. The course should also include a suggested 30 hours in a commercial kitchen laboratory.

Prerequisites: Culinary Arts I and Culinary Arts II
Culinary Arts III is an advanced course intended to further equip students with the skills and knowledge needed for various culinary careers. Students will gain experience in commercial food production and service operations, while preparing for further training at the postsecondary level. Upon completion of the course, students will be proficient in commercial kitchen safety and sanitation, dining room service, food preparation and presentation, bakeshop preparation skills and equipment, and advanced cooking principles. Students will create artifacts to include in their portfolios. The course should also include a suggested 30 hours in a commercial kitchen laboratory. Students may obtain their ServSafe credential in this course and have the opportunity to earn Local Dual Credit at PSCC.

## HUMAN SERVICES

The Human Services career cluster prepares learners for postsecondary credentials and careers in occupations that support the everyday functioning of society and individual well-being, including careers in social work, counseling, dietetics and nutrition, athletic training, cosmetology, aesthetics, and barbering. This career cluster includes four programs of study: Human and Social Sciences, Dietetics and Nutrition, Cosmetology, and Barbering. As our society grows and changes and a continued focus on nutritional and mental health, the more likely these careers will increase in need.
All programs of study have level 3 and 4 coursework available in Career Practicum (except Health Science) and Work Based Learning; see page 74 for course descriptions.

## Human \& Social Science Program of Study

Social health services focuses on the skills and knowledge needed for occupations that support the everyday functioning of society, such as social services workers, counselors, and family mediators. In this program of study, students investigate human needs and their impact on lifespan development, an overview of the human and social services fields, communication skills, and the historical and social changes of the modern family. As students progress through the program of study, they will compile artifacts for a portfolio in preparation for future training at a postsecondary level.

## Introduction to Human Studies LDC (Local Dual Credit)

Course is no longer available beginning in the 2024-2025 school year.

## Lifespan Development - 1 semester/1 credit

Grades 10, 11
Prerequisite: Introduction to Human Studies
Lifespan Development builds basic knowledge in human growth and development. Upon completion of the course, proficient students will have knowledge of developmental theory, principles of growth, behavior of children from conception through adolescence, adult development and aging, and death and dying. Artifacts will be created for inclusion in a portfolio, which will continue to build throughout the program of study.

Psychology SDC (Statewide Dual Credit) - 1 semester/1 credit
Grades 10, 11, 12
Students will study the development of scientific attitudes and skills, including critical thinking, problem solving, and scientific methodology. Students will also examine the structure and function of the nervous
system in human and non-human animals, the processes of sensation and perception, and life span development. Students will study social cognition, influence, and relations. Students will examine social and cultural diversity and diversity among individuals. Students will study memory, including encoding, storage, and retrieval of memory. Students will also study perspectives of abnormal behavior and categories of psychological disorders, including treatment thereof. Students will elaborate on the importance of drawing evidence-based conclusions about psychological phenomena and gain knowledge on a wide array of issues on both individual and global levels. Throughout the course, students will examine connections between content areas within psychology and relate psychological knowledge to everyday life. Students will explore the variety of careers available to those who study psychology.

## Cosmetology Program of Study

All courses in the Cosmetology program of study have been revised to address and prepare students for postsecondary and industry standards. Cosmetology is designed to prepare students for careers in cosmetology by developing an understanding of efficient and safe work practices, salon business concepts and operations, hair techniques and chemical services, facial and skin care procedures and state board theoretical practical application. Laboratory facilities and experiences simulate those found in the cosmetology industry. Students may acquire hours transferable to a postsecondary institution for completion of hourly requirements needed to sit for the Tennessee Cosmetology and Barber Examiners examination.

Cosmetology I LDC (Local Dual Credit) - $\mathbf{1}$ semester/1 credit
Grades 9, 10
Cosmetology I is the foundational course in the Human Services career cluster for students interested in learning more about becoming a cosmetologist. Upon completion of this course, proficient students will gain knowledge in the fundamental skills in both theory and practical applications of cosmetology practices. Laboratory facilities and experiences simulate those found in the cosmetology industry. Artifacts will be created for inclusion in a portfolio, which will continue throughout the full sequence of courses. Students may obtain their OSHA 10 General Industry credential in this course and have the opportunity to earn Local Dual Credit at PSCC.

## Cosmetology II DE (Dual Enrollment) - 1 semester/2 credits

## Grades 10, 11

## Prerequisite: Cosmetology I

Cosmetology II is the second course in the Cosmetology program of study intended to prepare students for careers in cosmetology by developing an understanding of efficient and safe work practices, nail procedures, hair design, and chemical services. Students will gain experience in practical applications of cosmetology practices. Laboratory facilities and experiences simulate those found in the cosmetology industry. Artifacts will be created for inclusion in a portfolio, which will continue throughout the full sequence of courses. Students have the opportunity to receive college credit through Tennessee College of Applied Technology (TCAT) upon successful completion of this course.

Cosmetology III DE (Dual Enrollment) - 1 semester/2 credits
Grade 11, 12
Prerequisite: Cosmetology II DE
Cosmetology III is the third course in the Cosmetology program of study intended to prepare students for careers in cosmetology by developing an understanding of efficient and safe work practices, salon business concepts and operations, advanced hair techniques and chemical services, and facial and skin care procedures. Students will gain experience in practical applications of cosmetology practices. Laboratory facilities and experiences simulate those found in the cosmetology industry. Artifacts will be created for inclusion in a portfolio, which will continue throughout the full sequence of courses. Students

## INFORMATION TECHNOLOGY

Information Technology careers involve the design, development, support and management of hardware, software, multimedia and systems integration services. The IT industry is a dynamic and entrepreneurial working environment that has a revolutionary impact on the economy and society. In addition to careers in the IT industry, IT careers are available in every sector of the economy - from Financial Services to Medical Services, Business to Engineering and Environmental Services. Anyone preparing for an IT career should have a solid grounding in math and science.

All courses in the Information Technology pathway begin with the Computer Science Foundations course. The AP Computer Science Principles course is available for level 2 or 3 course replacement in all Information Technology programs of study. All programs of study have level 3 and 4 coursework available in Career Practicum (except Health Science) and Work Based Learning; see page 74 for course descriptions.

## Computer Science Foundations LDC (Local Dual Credit) - 1 semester/1 credit Grades 9, 10

Computer Science Foundations (CSF) is a course intended to provide students with exposure to various information technology occupations and pathways such as Networking Systems, Coding, Web Design, and Cybersecurity. As a result, students will complete all core standards, as well as standards in two of four focus areas. Upon completion of this course, proficient students will be able to describe various information technology (IT) occupations and professional organizations. Moreover, they will be able to demonstrate logical thought processes and discuss the social, legal, and ethical issues encountered in the IT profession. Depending on the focus area, proficient students will also demonstrate an understanding of electronics and basic digital theory; project management and teamwork; client relations; causes and prevention of Internet security breaches; and writing styles appropriate for web publication. Upon completion of the CSF course, students will be prepared to make an informed decision about which Information Technology program of study to pursue. Students may obtain their OSHA 10 General Industry credential in this course and have the opportunity to earn Local Dual Credit at PSCC. This course satisfies the Computer Science graduation requirement.

AP Computer Science Principles - 1 semester/1 credits
Grades 9, 10, 11, 12

## Prerequisite: Algebra I

This course offers a multidisciplinary approach to teaching the underlying principles of computation. In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course engages students in the creative aspects of the field by allowing them to develop computational artifacts based on their interests. Students will also develop effective communication and collaboration skills by working individually, collaboratively to solve problems, and will discuss and write about the impacts these solutions could have on their community, society, and the world. Students must sit for the culminating exam to receive additional quality point weighting. This course satisfies the Computer Science graduation requirement. Satisfies the 4th math credit for graduation.

# Cybersecurity Program of Study 

Cybersecurity I-1 semester/1 credit
Grades 10, 11, 12

## Prerequisite: Computer Science Foundations and Algebra I

Cybersecurity I is a course intended to teach students the basic concepts of cybersecurity. The course places an emphasis on security integration, application of cybersecurity practices and devices, ethics, and best practices management. The fundamental skills in this course cover both in house and external threats to network security and design, how to enforce network level security policies, and how to safeguard an organization's information. Upon completion of this course, proficient students will demonstrate an understanding of cybersecurity concepts, identify fundamental principles of networking systems, understand network infrastructure and network security, and be able to demonstrate how to implement various aspects of security within a networking system. This course satisfies the Computer Science graduation requirement.

## Cybersecurity II - 1 semester/1 credit

Grades 10, 11, 12

## Prerequisite: Computer Science Foundations and Cybersecurity I

Cybersecurity II challenges students to develop advanced skills in concepts and terminology of cybersecurity. This course builds on previous concepts introduced in Cybersecurity I while expanding the content to include malware threats, cryptography, wireless technologies, and organizational security. Upon completion of this course, proficient students will be able to demonstrate an understanding of cybersecurity ethical decisions, malware threats, how to detect vulnerabilities, principles of cryptology, security techniques, contingency plan techniques, security analysis, risk management techniques, and advanced methods of cybersecurity. This course satisfies the Computer Science graduation requirement.

## Coding Program of Study

Coding I-1 semester/1 credit
Grades 10, 11

## Prerequisite: Computer Science Foundations and Algebra I

Coding I is a course intended to teach students the basics of computer programming. The course places emphasis on practicing standard programming techniques and learning the logic tools and methods typically used by programmers to create simple computer applications. Upon completion of this course, proficient students will be able to solve problems by planning multistep procedures; write, analyze, review, and revise programs, converting detailed information from workflow charts and diagrams into coded instructions in a computer language; and will be able to troubleshoot/debug programs and software applications to correct malfunctions and ensure their proper execution. This course satisfies the Computer Science graduation requirement.

Coding II-1 semester/ $\mathbf{1}$ credit
Grades 10, 11, 12
Prerequisites: Coding I
Coding II challenges students to develop advanced skills in problem analysis, construction of algorithms, and computer implementation of algorithms as they work on programming projects of increased complexity. In so doing, they develop key skills of discernment and judgment as they must choose from among many languages, development environments, and strategies for the program life cycle. Course content is reinforced through numerous short- and long-term programming projects, accomplished both individually and in small groups. These projects are meant to hone the discipline and logical thinking skills necessary to craft error-free syntax for the writing and testing of programs. Upon completion of this course, proficient students will demonstrate an understanding of object-oriented programming language using high-level languages such as FOCUS, Python, or SAS. This course satisfies the Computer Science graduation requirement.

# Web Design Program of Study 

## Web Design Foundations LDC (Local Dual Credit) - 1 semester/1 credit

Grades 10, 11
Prerequisite: Computer Science Foundations, Algebra I, and co-requisite: Geometry
Web Design Foundations is a course that prepares students with work-related web design skills for advancement into postsecondary education and industry. The course is intended to develop fundamental skills in both theory and practical application of the basic web design and development process, project management and teamwork, troubleshooting and problem solving, and interpersonal skill development. Laboratory facilities and experiences simulate those found in the web design and development industry; where interaction with a "client" is indicated in the standards, it is expected that students' peers or the instructor may serve as mock clients in lieu of an actual relationship with an industry partner. Upon completion of this course, proficient students will be prepared for more advanced coursework in the Web Design program of study. This course satisfies the Fine Arts graduation requirement.

## Web Design Development - 1 semester/1 credit <br> Prerequisite: Web Design Foundations

Grades 10, 11, 12

Web Site Development builds on the skills and knowledge gained in Web Design Foundations to further prepare students for success in the web design and development fields. Emphasis is placed on applying the design process toward projects of increasing sophistication, culminating in the production of a functional, static website. As students work toward this goal, they acquire key skills in coding, project management, basic troubleshooting and validation, and content development and analysis. Artifacts of the work completed in this course will be logged in a student portfolio demonstrating mastery of skills and knowledge. Upon completion of this course, proficient students will be prepared to pursue a variety of postsecondary programs in the computer sciences, sit for industry certification, or apply their skills in a capstone Web Design Practicum.

## Required Computer Credit Courses

Students graduating from Blount County High Schools must have a minimum of one computer credit; in addition, beginning with the graduating class of 2028, all graduates must complete a minimum of one course in Computer Science. The following options are available to students:

## Intro to Computer Science - $\mathbf{1}$ semester/1 credit

Grades 9, 10
This course is designed to focus on both the ISTE (International Society for Technology in Education) and the CSTA (Computer Science Teachers Association) Standards for Students. Each of the tasks highlight computational thinking practices, encouraging students to frame problems in ways that inspire inquiry, problem solving and innovative design. The tasks empower learners to take an active role in choosing, achieving and demonstrating competency using technology applications in the learning process. The products associated with the products for each task focuses on different sets of CSTA standards . Students explore computer networks and systems and the impact technology has on the daily lives of people. Students have the opportunity to investigate algorithms and programming or coding skills. This investigation encourages students to work with planning and creating apps, websites or programs.

Computer Science Foundations LDC (Local Dual Credit) - 1 semester/1 credit Grades 9, 10, 11, 12 Computer Science Foundations (CSF) is a course intended to provide students with exposure to various information technology occupations and pathways such as Networking Systems, Coding, Web Design, and Cybersecurity. As a result, students will complete all core standards, as well as standards in two of four focus areas. Upon completion of this course, proficient students will be able to describe various information technology (IT) occupations and professional organizations. Moreover, they will be able to demonstrate logical thought processes and discuss the social, legal, and ethical issues encountered in the IT profession. Depending on the focus area, proficient students will also demonstrate an understanding of electronics and basic digital theory; project management and teamwork; client relations; causes and prevention of Internet security breaches; and writing styles appropriate for web publication. Upon completion of the CSF course, students will be prepared to make an informed decision about which Information Technology program of study to pursue. Students may obtain their OSHA 10 General Industry credential in this course and have the opportunity to earn Local Dual Credit at PSCC. This course satisfies the Computer Science graduation requirement.

AP Computer Science Principles - 1 semester/1 credits Grades 9, 10, 11, 12 Prerequisite: Algebra I
This course offers a multidisciplinary approach to teaching the underlying principles of computation. In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course engages students in the creative aspects of the field by allowing them to develop computational artifacts based on their interests. Students will also develop effective communication and collaboration skills by working individually, collaboratively to solve problems, and will discuss and write about the impacts these solutions could have on their community, society, and the world. Students must sit for the culminating exam to receive additional quality point weighting. This course satisfies the Computer Science graduation requirement.

## LAW, PUBLIC SAFETY, CORRECTIONS, \& SECURITY

The Law, Public Safety, Corrections, and Security career cluster helps prepare students for careers in planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services. This career cluster houses three programs of study to provide students will opportunities in all areas of security: Criminal Justice and Correction Services, Pre-Law, and Fire Management Services.

All programs of study have level 3 and 4 coursework available in Career Practicum (except Health Science) and Work Based Learning; see page 74 for course descriptions.

## Criminal Justice \& Correction Services Program of Study

The Criminal Justice and Correction Services program of study prepares students for a range of careers in law enforcement, crime scene analysis, forensic science, public safety, and criminal justice. Course content emphasizes procedures and laws governing the application of justice in the United States, from constitutional rights to crisis scenario management and the elements of criminal investigations. Upon completion of this program of study, students will be equipped with the knowledge and skill preparation for postsecondary or career opportunities in many law- and justice-related fields.

Criminal Justice I is the first course in the Criminal Justice and Correction Services program of study. It serves as a comprehensive survey of how the law enforcement, legal, and correctional systems interact with each other in the United States. Upon completion of this course, proficient students will understand the context of local, state, and federal laws, the concepts of crime control and the judicial process, and the importance of communications and professionalism in law enforcement. Students may obtain their OSHA 10 General Industry credential in this course and have the opportunity to earn Local Dual Credit at PSCC.

## Criminal Justice II DE (Dual Enrollment) - $\mathbf{1}$ semester/1 credit Prerequisite: Criminal Justice I

Grades 10, 11
Criminal Justice II is the second course in the Criminal Justice and Correction Services program of study. Upon completion of this course, proficient students will understand the impact of the constitution on law enforcement, law enforcement and police procedures, alcohol and beverage laws, sentencing, and the importance of communications and professionalism in law enforcement. Students in this course are eligible for Dual Enrollment through PSCC.

## Criminal Justice III DE (Dual Enrollment) - 1 semester/1 credit

Grades 11, 12
Prerequisite: Criminal Justice I and Criminal Justice II
Forensic Criminal Investigations is the third course designed to equip students with the knowledge and skills to be successful in the sciences of criminal investigations. Students will learn terminology and investigation skills related to the crime scene, aspects of criminal behavior, and applications of the scientific inquiry to solve crimes. By utilizing the scientific inquiry method, students will obtain and analyze evidence through simulated crime scenes and evaluation of case studies. Upon completion of this course, proficient students will be able to identify careers in forensic science and criminology, summarize the laws that govern the application of forensic science, and draw key connections between the history of the forensic science system and the modern legal system. Students in this course are eligible for Dual Enrollment through PSCC.

## MARKETING, DISTRIBUTION \& LOGISTICS

The Marketing, Distribution \& Logistics career cluster prepares learners for careers in planning, managing, and performing marketing activities to reach organizational objectives, as well as careers involved in the planning, management, and movement of people, materials, and products by road, air, rail, and water. A large percentage of jobs in the Marketing career cluster have a bright outlook and are expected to grow rapidly in the next several years, due to ample job openings and the addition of new occupations.

All programs of study have level 3 and 4 coursework available in Career Practicum (except Health Science) and Work Based Learning; see page 74 for course descriptions.

## Marketing Management Program of Study

Introduction to Business \& Marketing LDC (Local Dual Credit) - 1 semester/1 credit Grades 9, 10 Introduction to Business and Marketing is an introductory course designed to give students an overview of the Business Management and Administration, Marketing, and Finance career clusters. The course helps students prepare for the growing complexities of the business world by examining basic principles of business, marketing, and finance in addition to exploring key aspects of leadership, ethical and social responsibilities, and careers. Students' academic skills in communications, mathematics, and economics
are reinforced with activities modeled in the context of business topics. Upon completion of this course, proficient students will be equipped with the foundational skills to succeed in any of the Business, Marketing, or Finance programs of study and will be prepared to make an informed decision regarding which pathways they would like to pursue in high school. Students may obtain their OSHA 10 Construction Industry credential in this course and have the opportunity to earn Local Dual Credit at PSCC.

## Marketing \& Management I LDC (Local Dual Credit) - 1 semester/1 credit

Grades 10, 11

## Prerequisite: Introduction to Business \& Marketing

Marketing and Management I: Principles, the second course in the Marketing Management program of study and the first course Supply Chain Management program of study, focuses on the study of marketing concepts and their practical applications. Students will examine the risks and challenges that 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 social media, digital and mobile marketing, economics fundamentals, international marketing, and career exploration. Upon completion of this course, proficient students will understand foundational marketing principles, relevant economic principles, the marketing mix, and product development and selling strategies as well as be prepared to succeed in both the Marketing Management and Supply Chain Management programs of study. Students in this course are eligible for Local Dual Credit through PSCC. This course satisfies the Economics graduation requirement.

## Marketing \& Management II LDC (Local Dual Credit) - 1 semester/1 credit Grades 10, 11, 12 Prerequisite: Introduction to Business \& Marketing and Marketing \& Management I

Marketing \& Management II: Advanced Strategies is a study of marketing concepts and principles used in management. Students will examine the challenges, responsibilities, and risks that managers face in today's workplace. Subject matter includes finance, business ownership, risk management, marketing information systems, purchasing, promotion, and human resource management. Students will develop critical documents to prepare them for careers in marketing management, including a marketing plan, institutional promotional plan, and human resources materials. Upon conclusion of this course, proficient students will understand key management functions, promotional concepts, pricing and purchasing, risk management, and legal and ethical issues, as well as engage in marketing research and develop key financial documents related to marketing management. Students in this course are eligible for Local Dual Credit through PSCC.

## Social Media Marketing and Analytics - 1 semester/1 credit

Grades 10, 11, 12

## Prerequisite: Marketing \& Management I

Social Media Marketing \& Analytics is a study of concepts and principles used in social media marketing. Students will examine the uses, marketing strategies and data generated by social media marketing. Subject matter includes foundational social media knowledge, social media marketing strategies, communication, and ethical responsibilities. Students in this course are eligible for Local Dual Credit through PSCC.

## STEM (SCIENCE, TECHNOLOGY, ENGINEERING, \& MATHEMATICS)

Given the critical nature of much of the work in the STEM career cluster, job possibilities abound even in times of economic downturn. More scientists, technologists and engineers will be needed to meet
environmental regulations and to develop methods of cleaning up existing hazards. A shift in emphasis toward preventing problems rather than controlling those that already exist, as well as increasing public health concerns, also will spur demand for these positions.

All courses in the Information Technology pathway begin with the Computer Science Foundations course. The AP Computer Science Principles course is available for level 2 or 3 course replacement in all Information Technology programs of study. All programs of study have level 3 and 4 coursework available in Career Practicum (except Health Science) and Work Based Learning; see page 74 for course descriptions.

## Principles of Engineering \& Technology LDC (Local Dual Credit) - $\mathbf{1}$ semester/1 credit Grades 9, 10

 Principles of Engineering and Technology is a foundational course in the STEM cluster for students interested in learning more about careers in engineering and technology. This course covers basic skills required for engineering and technology fields of study. Upon completion of this course, proficient students are able to identify and explain the steps in the engineering design process. They can evaluate an existing engineering design, use fundamental sketching and engineering drawing techniques, complete simple design projects using the engineering design process, and effectively communicate design solutions to others. Students may obtain their OSHA 10 General Industry credential in this course and have the opportunity to earn Local Dual Credit at PSCC.
## AP Computer Science Principles - 1 semester/1 credits

Grades 9, 10, 11, 12

## Prerequisite: Algebra I

This course offers a multidisciplinary approach to teaching the underlying principles of computation. In this course, students will develop computational thinking skills vital for success across all disciplines, such as using computational tools to analyze and study data and working with large data sets to analyze, visualize, and draw conclusions from trends. The course engages students in the creative aspects of the field by allowing them to develop computational artifacts based on their interests. Students will also develop effective communication and collaboration skills by working individually, collaboratively to solve problems, and will discuss and write about the impacts these solutions could have on their community, society, and the world. Students must sit for the culminating exam to receive additional quality point weighting. This course satisfies the Computer Science graduation requirement. Satisfies the 4th math credit for graduation.

## Engineering Program of Study

Engineering is a new program of study designed for students interested in the various disciplines of engineering and engineering technology. Course content is arranged around four sequenced, progressive courses that provide students with the opportunity to develop critical thinking skills and understanding of engineering concepts. Students then apply these skills in conjunction with the multi-step engineering design process to solve real-world problems. The capstone Engineering Practicum course places students with industry partners to complete a design project, report the results, and present their project before an audience. Students have the option to complete AP Physics as an alternative to the Engineering Practicum course. Upon completion of this POS, students will be prepared to pursue engineering studies at postsecondary institutions.

Engineering Design I is a fundamental course in the STEM cluster for students interested in developing their skills in preparation for careers in engineering and technology. The course covers essential knowledge, skills, and concepts required for postsecondary engineering and technology fields of study. Upon completion of this course, proficient students are able to describe various engineering disciplines, as well as admissions requirements for postsecondary engineering and engineering technology programs in Tennessee. They will also be able to identify simple and complex machines; calculate various ratios related to mechanisms; explain fundamental concepts related to energy; understand Ohm's Law; follow the steps in the engineering design process to complete a team project; and effectively communicate design solutions to others. This course satisfies the Lab Science graduation requirement.

## Engineering Design II - 1 semester/1 credit

Grades 10, 11, 12

## Prerequisites: Engineering Design I and Biology or Chemistry

Engineering Design II is an applied course in the STEM career cluster for students interested in further developing their skills as future engineers. This course covers knowledge, skills, and concepts required for postsecondary engineering and technology fields of study. Upon completion of this course, proficient students are able to explain the differences between scientists and engineers, understand the importance of ethical practices in engineering and technology, identify components of control systems, describe differences between laws related to fluid power systems, explain why material and mechanical properties are important to design, create simple free body diagrams, use measurement devices employed in engineering, conduct basic engineering economic analysis, follow the steps in the engineering design process to complete a team project, and effectively communicate design solutions to others. This course satisfies the Lab Science graduation requirement.

## Technology Program of Study

The Technology program of study is for students who wish to pursue careers in robotics, electronics, and related engineering and technology fields. Course content introduces students to the principles of engineering and the engineering design process, then progresses to apply these skills in the context of robotics, electronics, and automated systems. Upon completion of this POS, students will have gained valuable training in an Engineering Practicum or AP Physics capstone course, and be prepared for advanced study in a variety of STEM fields at the postsecondary level.

## Digital Electronics DE (Dual Enrollment) - 1 semester/1 credit

## Grades 10, 11

## Prerequisites: Algebra I and Principles of Manufacturing

Digital Electronics is intended to provide students with an introduction to the basic components of digital electronic systems and equip them with the ability to use these components to design more complex digital systems. Proficient students will be able to (1) describe basic functions of digital components (including gates, flip flops, counters, and other devices upon which larger systems are designed), (2) use these devices as building blocks to design larger, more complex circuits, (3) implement these circuits using programmable devices, and (4) effectively communicate designs and systems. Students develop additional skill in technical documentation when operating and troubleshooting circuits. Upon completion of the Digital Electronics course, proficient students will be able to design a complex digital system and communicate their designs through a variety of media. This is a dual enrollment course provided through Tennessee College of Applied Technology - Knoxville (TCAT-K) that will be offered at the high school site during regular school hours.

Robotics \& Automated Systems - 1 semester/1 credit
Grades 10, 11, 12
Prerequisites: Algebra I, Geometry, Chemistry or Physics, Principles of Manufacturing, and Digital Electronics

Robotics \& Automated Systems is an applied course for students who wish to explore how robots and automated systems are used in industry. Upon completion of this course, proficient students will have an understanding of the historical and current uses of robots and automated systems; programmable circuits, interfacing both inputs and outputs; ethical standards for engineering and technology professions; and testing and maintenance of robots and automated systems. May be replaced with Mechatronics DE.

## TRANSPORTATION

The Transportation career cluster prepares students for careers involving automotive repair, automotive collision repair, and aviation. Automotive careers require you to have a strong mechanical ability. The nation's dependence on automobiles means the job demand will remain strong in the automotive fields. Aviation programs prepare students for a range of possible aviation careers, such as pilots, aircraft engineers, air traffic control specialists, aircraft mechanics, or airline statisticians.

All programs of study have level 3 and 4 coursework available in Career Practicum (except Health Science) and Work Based Learning; see page 74 for course descriptions.

## Automotive Maintenance \& Light Repair Program of Study

## Maintenance \& Light Repair I LDC (Local Dual Credit)- 1 semester/1 credit Grades 9, 10

The Maintenance and Light Repair I (MLR I) course prepares students for entry into Maintenance and Light Repair II. Students explore career opportunities and requirements of a professional service technician. Content emphasizes beginning transportation service skills and workplace success skills. Students study safety, tools, equipment, shop operations, basic engine fundamentals, and basic technician skills. Upon completing all of the Maintenance and Light Repair courses, students may enter the automotive service industry as an ASE Certified MLR Technician. Hours earned in the Maintenance and Light Repair courses may be used toward meeting Automotive Service Excellence (ASE) Education Foundation standards and Tennessee Department of Education standards. ASE requires that $95 \%$ of the P-1 tasks, $80 \%$ of the P-2 tasks, and $50 \%$ of the P-3 tasks will be accomplished. These tasks are notated in these standards. Students may obtain their OSHA 10 General Industry credential in this course and have the opportunity to earn Local Dual Credit at PSCC.

Maintenance \& Light Repair II DE (Dual Enrollment) - $\mathbf{1}$ semester/ $\mathbf{2}$ credits
Grades 10, 11

## Prerequisite: Maintenance \& Light Repair I

The Maintenance and Light Repair II (MLR II) course prepares students for entry into Maintenance and Light Repair III. Students study and service suspension and steering systems and brake systems. Upon completing all of the Maintenance and Light Repair courses, students may enter the automotive service industry as an ASE Certified MLR Technician. Hours earned in the Maintenance and Light Repair courses may be used toward meeting Automotive Service Excellence (ASE) Education Foundation standards and Tennessee Department of Education standards. ASE requires that $95 \%$ of the P-1 tasks, $80 \%$ of the P-2 tasks, and $50 \%$ of the P-3 tasks will be accomplished. These tasks are notated in these standards. Students have the opportunity to receive college credit through Tennessee College of Applied Technology (TCAT) upon successful completion of this course.

The Maintenance and Light Repair III (MLR III) students study automotive general electrical systems, starting and charging systems, batteries, lighting, and electrical accessories. Upon completing all of the Maintenance and Light Repair courses, students may enter the automotive service industry as an ASE Certified MLR Technician. Hours earned in the Maintenance and Light Repair courses may be used toward meeting Automotive Service Excellence (ASE) Education Foundation standards and Tennessee Department of Education standards. ASE requires that $95 \%$ of the P-1 tasks, $80 \%$ of the P-2 tasks, and $50 \%$ of the P-3 tasks will be accomplished. These tasks are notated in these standards. Students have the opportunity to receive college credit through Tennessee College of Applied Technology (TCAT) upon successful completion of this course.

## Automotive Collision Repair Program of Study

## Introduction to Collision Repair LDC (Local Dual Credit) - 1 semester/1 credit <br> Grades 9, 10

Introduction to Collision Repair is a foundational course in the Automotive Collision Repair program of study for students interested in learning more about automotive collision repair technician careers. Upon completion of this course, proficient students will be able to identify and explain the basic steps in the collision repair process, emphasizing the tools, equipment, and materials used. They will be able to describe the major parts of an automobile body and safely perform basic procedures in preparing automotive panels for repair, applying body filling, and preparing surfaces for painting. Standards in this course include career investigation of the opportunities in automotive collision repair as well as an overview of the history of automobile design and construction. Students completing the Automotive Collision Repair program of study will be eligible to take the examination for Automotive Student Excellence (ASE) Student Certification in Collision Repair. Some tasks are assigned a "High Priority (HP)" designation. NATEF accredited programs must include at least $95 \%$ of the HP-I (Individual) tasks and $90 \%$ of the HP-G (Group) tasks in the curriculum. Students may obtain their OSHA 10 General Industry credential in this course and have the opportunity to earn Local Dual Credit at PSCC.

## Collision Repair I DE (Dual Enrollment) - $\mathbf{1}$ semester/1 credit

Grades 10, 11, 12

## Prerequisite: Introduction to Collision Repair

Collision Repair: Non-Structural is for students who wish to obtain in-depth knowledge and skills in repair procedures for non-structural repairs in preparation for postsecondary training and careers as collision repair technicians. Upon completion of this course, proficient students will be able to analyze non-structural collision damage and write and revise repair plans. Students will read and interpret technical texts to determine, understand, and safely perform appropriate repair techniques and procedures. Standards in this course include preparing vehicles for repair, removing and replacing panels and body components, metal finishing, body filling, removing and replacing moveable glass and hardware, metal welding and cutting, and repair of plastics. Students completing the Automotive Collision Repair program of study will be eligible to take the examination for Automotive Student Excellence (ASE) Student Certification in Collision Repair. Students completing this course will be eligible to take the examination for ASE Professional Certification in Non-Structural Analysis and Damage Repair (B3). Some tasks are assigned a "High Priority (HP)" designation. NATEF accredited programs must include at least $95 \%$ of the HP-I (Individual) tasks and $90 \%$ of the HP-G (Group) tasks in the curriculum. Students have the opportunity to receive college credit through Tennessee College of Applied Technology (TCAT) upon successful completion of this course.

Collision Repair II DE (Dual Enrollment) - 1 semester/2 credits
Grades 10, 11, 12
Prerequisite: Introduction to Collision Repair and Collision Repair I DE

Collision Repair: Painting \& Refinishing is for students who wish to obtain in-depth knowledge and skills in automotive painting and refinishing procedures in preparation for postsecondary training and careers as collision repair technicians. Upon completion of this course, proficient students will be able to develop, document, and implement refinishing plans for given vehicles. Students will read and interpret technical texts to determine, understand, and safely perform appropriate repair techniques and procedures. Standards in this course include surface preparation; spray gun and related equipment operation, paint mixing, matching, and applying; diagnosis and correction of paint defects; and final detailing. Students have the opportunity to receive college credit through Tennessee College of Applied Technology (TCAT) upon successful completion of this course.

Collision Repair III DE (Dual Enrollment) - 1 semester/2 credits
Grades 10, 11, 12
Prerequisites: Introduction to Collision Repair, Collision Repair I DE, Collision Repair II DE
Collision Repair: Painting \& Refinishing is for students who wish to obtain in-depth knowledge and skills in automotive painting and refinishing procedures in preparation for postsecondary training and careers as collision repair technicians. Upon completion of this course, proficient students will be able to develop, document, and implement refinishing plans for given vehicles. Students will read and interpret technical texts to determine, understand, and safely perform appropriate repair techniques and procedures. Standards in this course include surface preparation; spray gun and related equipment operation, paint mixing, matching, and applying; diagnosis and correction of paint defects; and final detailing. Students completing the Automotive Collision Repair program of study will be eligible to take the examination for Automotive Student Excellence (ASE) Student Certification in Collision Repair Students completing this course will be eligible to take the examination for ASE Professional Certification in Painting \& Refinishing (B2). Some tasks are assigned a "High Priority (HP)" designation. NATEF accredited programs must include at least $95 \%$ of the HP-I (Individual) tasks and $90 \%$ of the HP-G (Group) tasks in the curriculum. Students have the opportunity to receive college credit through Tennessee College of Applied Technology (TCAT) upon successful completion of this course.

# CAREER PRACTICUM \& WORK-BASED LEARNING 

Career Practicum - 1 semester/1 credit

Grades 11, 12
Prerequisite: Enrollment is by permission of the Program of Study Instructor \& requires 2 course credits previously earned in the Program of Study.
Career Practicum is a capstone course intended to provide students with the opportunity to apply the skills and knowledge learned in previous program of study courses within a professional, working environment. While continuing to add to their technical skillsets, students in this course assume increasing responsibility for overseeing processes and managing complex projects. Specifically, proficient students will be able to work in teams to plan projects; develop and problem solve within the career cluster area; analyze and compile professional reports; and connect practicum activities to career and postsecondary opportunities. For all projects undertaken in this course, students are expected to follow the focus area in their chosen program of study, while also refining skills previously acquired to achieve deeper levels of mastery. Upon completion of the practicum, proficient students will be prepared for postsecondary study and career advancement in their chosen focus area.

## Work-Based Learning Career Practicum - 1 or 2 semesters/ 1 or 2 credits per year with a maximum of 3 credits Grades 11, 12

Prerequisite: Enrollment is by permission of the HHS Coordinator and permission of the Program of Study Instructor \& requires 2 course credits previously earned in the Program of Study.
This capstone course aligns with the requirements of the Work-Based Learning Framework (established in Tennessee State Board High School Policy), with the Tennessee Department of Education's Work-Based Learning Policy Guide, and with state and federal Child Labor Law. As such, the following components are course requirements:

1. A student will have a Personalized Learning Plan that identifies their long-term goals, demonstrates how the Work-Based Learning (WBL) experience aligns with their elective focus and/or high school plan of study, addresses how the student plans to meet and demonstrate the course standards, and addresses employability skill attainment in the following areas:
a. application of academic and technical knowledge and skills (embedded in course standards);
b. career knowledge and navigation skills;
c. 21st Century learning and innovation skills; and
d. personal and social skills.
2. A student will develop portfolios, or a similar compilation of work and evaluation samples, that demonstrate employability skill development in the categories above.
3. A student will exhibit work readiness attitudes and skills prior to beginning a WBL experience.
4. A student will have an up-to-date Training Agreement and Safety Training Log on site at the company and at the school as appropriate for workplace-based experiences. A copy of this required paperwork must be kept in school records for five years after placement.
5. An evaluation process must be used to ensure that experiences are high-quality for the student.

## PROGRAMS OF STUDY

Students may complete a Program of Study in Career Technical Education (CTE), Fine Arts, Humanities, JROTC, Physical Education, AP/Honors, or Math \& Science (above graduation requirements).

## Career Technical Education (CTE) Programs of Study

The CTE Programs of Study have sequenced courses. More details can be found in the course descriptions above.

## Advanced Manufacturing

| Program of Study | Level I | Level II | Level III | Level IV |
| :---: | :---: | :---: | :---: | :---: |
| Mechatronics | Principles of <br> Manufacturing LDC | Digital Electronics DE | Mechatronics DE or <br> Robotics \& Automated <br> Systems | Work-Based Learning <br> or Manufacturing <br> Practicum |
| Welding | Principles of <br> Manufacturing LDC | Welding I DE | Welding II DE (2) | Work-Based Learning <br> or Manufacturing <br> Practicum |

## Agriculture, Food, \& Natural Resources

| Program of Study | Level I | Level II | Level III | Level IV |
| :---: | :---: | :---: | :---: | :---: |


| Agricultural, <br> Engineering, <br>  <br> Mechanical Systems | Agriscience LDC ${ }^{1}$ | Principles of <br> Agricultural <br> Mechanics |  <br> Equipment | Work-Based Learning <br> or Supervised Ag. <br> Experience |
| :---: | :---: | :---: | :---: | :---: |
| Veterinary and <br> Animal Science | Agriscience LDC ${ }^{1}$ | Small Animal <br> Science Technologies | Large Animal <br> Science Technologies | Work-Based Learning <br> or Supervised Ag. <br> Experience |

${ }^{1}$ Satisfies the Lab Science graduation requirement.

## Architecture \& Construction

| Program of Study | Level I | Level II | Level III | Level IV |
| :---: | :---: | :---: | :---: | :---: |
| Residential and <br> Commercial <br> Construction | Fundamentals of <br> Construction LDC | Residential and <br> Commercial <br> Construction I (1 or 2) | Residential and <br> Commercial <br> Construction II (1 or 2) | Work-Based Learning <br> or Construction <br> Practicum |

Arts, Audio/Visual Technology, \& Communications

| Program of Study | Level I | Level II | Level III | Level IV |
| :---: | :---: | :---: | :---: | :---: |
| Digital Arts <br> and Design | Digital Arts <br> and Design I LDC |  |  |  |
| Audio \& Visual <br> Production | A/V Production I LDC | A/V Production II | Aigital Arts |  |
| and Design II | Digital Arts <br> and Design III | Work-Based Learning <br> or Applied Arts <br> Practicum |  |  |

${ }^{2}$ Satisfies the Fine Arts graduation requirement.

## Business Management \& Administration

| Program of Study | Level I | Level II | Level III | Level IV |
| :---: | :---: | :---: | :---: | :---: |
| Business <br> Management | Intro to Business <br> $\&$ Marketing LDC | Business <br> Communications or <br> Accounting I | Business <br> Management ${ }^{3}$ | Work-Based Learning <br>  <br> Entrepreneurship <br> Practicum |

${ }^{3}$ Satisfies the Personal Finance graduation requirement.

Education \& Training

| Program of Study | Level I | Level II | Level III | Level IV |
| :---: | :---: | :---: | :---: | :---: |
| Education and <br> Training | Intro to Teaching as a <br> Profession LDC | Teaching as a <br> Profession I | Teaching as a <br> Profession II DE | Work-Based Learning <br> or Teaching as a |

$\square$
Finance

| Program of Study | Level I | Level II | Level III | Level IV |
| :---: | :---: | :---: | :---: | :---: |
| Banking \& Finance |  <br> Marketing LDC | Accounting I | Banking \& Finance | Work-Based Learning <br>  <br> Entrepreneurship <br> Practicum |

Government \& Public Administration

| Program of Study | Level I | Level II | Level III | Level IV |
| :---: | :---: | :---: | :---: | :---: |
| Leadership in <br> Government | Air Force JROTC I | Air Force JROTC II ${ }^{4}$ | Air Force JROTC III <br>  <br>  <br> Civics | Air Force JROTC IV |

${ }^{4}$ Satisfies the Wellness graduation requirement.
${ }^{5}$ Satisfies the Personal Fitness, Personal Finance, and US Government \& Civics graduation requirements.
Health Science

| Program of Study | Level I | Level II | Level III | Level IV |
| :---: | :---: | :---: | :---: | :---: |
| Diagnostic <br> Services | Health Science <br> Education LDC | Human Anatomy <br> and Physiology ${ }^{1}$ | Diagnostic Medicine | Clinical <br> Internship (2) |
| Nursing <br> Services | Health Science <br> Education LDC | Human Anatomy <br> and Physiology ${ }^{1}$ | Medical Therapeutics | Nursing Education (2) |
| Emergency | Health Science <br> Education LDC | Human Anatomy <br> and Physiology ${ }^{1}$ | Medical Therapeutics | Emergency Medical <br> Services DE |
| Sport \& Human |  |  |  |  |
| Performance | Health Science <br> Education LDC | Human Anatomy <br> and Physiology ${ }^{1}$ | Rehabilitation Careers | Clinical <br> Internship (2) |
| Therapeutic | Health Science <br> Services | Human Anatomy <br> and Physiology ${ }^{1}$ | Medical Therapeutics <br> or Medical Assisting | Clinical <br> Internship (2) |

${ }^{1}$ Satisfies the Lab Science graduation requirement.

## Hospitality \& Tourism

| Program of Study | Level I | Level II | Level III | Level IV |
| :---: | :---: | :---: | :---: | :---: |
| Culinary Arts | Culinary Arts I | Culinary Arts II | Culinary Arts III LDC | Work-Based Learning |


|  |  |  |  | or Culinary Arts <br> Practicum |
| :--- | :--- | :--- | :--- | :---: |

## Human Services

| Program of Study | Level I | Level II | Level III | Level IV |
| :---: | :---: | :---: | :---: | :---: |
| Health \& Social <br> Science | Entrodtetionto <br> Htrman Stucties ŁDC | Lifespan <br> Development | Psychology SDC | Work-Based Learning |
| Cosmetology | Cosmetology I LDC | Cosmetology II DE (2) | Cosmetology III DE <br> $(2)$ | Work-Based Learning <br> or Cosmetology <br> Practicum |

## Information Technology

| Program of Study | Level I | Level II | Level III | Level IV |
| :---: | :---: | :---: | :---: | :---: |
| Coding | Computer Science <br> Foundations LDC ${ }^{6}$ | Coding $\mathrm{I}^{6}$ | Coding II ${ }^{6}$ or AP Computer Science Principles ${ }^{6}$ | Work-Based Learning or Coding Practicum |
| Cybersecurity | Computer Science <br> Foundations LDC ${ }^{6}$ | Cybersecurity $\mathrm{I}^{6}$ | Cybersecurity II $^{6}$ or AP Computer Science Principles ${ }^{6}$ | Work-Based Learning Career Practicum or Cybersecurity Practicum |
| Web Design | Computer Science Foundations LDC ${ }^{6}$ | Web Design Foundations ${ }^{2}$ | Web Design <br> Development or AP Computer Science Principles ${ }^{6}$ | Work-Based Learning or Web Design <br> Practicum |

${ }^{2}$ Satisfies the Fine Arts graduation requirement.
${ }^{6}$ Satisfies the Computer Science graduation requirement.
Law, Public Safety, Corrections, \& Security

| Program of Study | Level I | Level II | Level III | Level IV |
| :---: | :---: | :---: | :---: | :---: |
| Criminal Justice | Criminal Justice I <br> LDC | Criminal Justice II DE | Criminal Justice III <br> DE | Work-Based Learning <br> or Criminal Justice <br> Practicum |

Distribution, Marketing, \& Logistics

| Program of Study | Level I | Level II | Level III | Level IV |
| :--- | :--- | :--- | :--- | :--- |


| Marketing | Introduction to |
| :---: | :---: | :---: | :---: | :---: |
| Management | Business and |
| Marketing LDC |  |$\quad$| Marketing and |
| :---: |
| Management I LDC ${ }^{7}$ | | Marketing and |
| :---: |
| Management II LDC |
|  |
| Analytics LDC |$\quad$| Work-Based Learning |
| :---: |
| or Marketing |
| Management |
| Practicum |

${ }^{7}$ Satisfies the Economics graduation requirement.

Science, Technology, Engineering, \& Mathematics (STEM)

| Program of Study | Level I | Level II | Level III | Level IV |
| :---: | :---: | :---: | :---: | :---: |
| Engineering | Principles of <br> Engineering and <br> Technology LDC | Engineering <br> Design I | Engineering <br> Design II ${ }^{1}$ or AP <br> Computer Science <br> Principles ${ }^{6,7}$ | Work-Based Learning <br> or Engineering <br> Practicum |
| Technology | Principles of <br> Engineering and <br> Technology LDC | Digital <br> Electronics DE | Robotics and <br> Automated Systems or <br> AP Computer Science <br> Principles ${ }^{6,7}$ | Work-Based Learning <br> or Technology <br> Practicum |

${ }^{1}$ Satisfies the Lab Science graduation requirement.
${ }^{6}$ Satisfies the Computer Science graduation requirement.
${ }^{7}$ Satisfies the 4th Math graduation requirement.

## Transportation

| Program of Study | Level I | Level II | Level III | Level IV |
| :---: | :---: | :---: | :---: | :---: |
| Automotive <br> Maintenance and <br> Light Repair | Maintenance \& Light <br> Repair I LDC | Maintenance \& Light <br> Repair II DE (2) | Maintenance \& Light <br> Repair III DE | Work-Based Learning <br> or Automotive MLR <br> Practicum |
| Automotive <br> Collision Repair | Introduction to <br> Collision Repair LDC | Collision Repair I <br> DE | Collision Repair II <br> DE (2) | Work-Based Learning <br> or Automotive CR <br> Practicum |

## Humanities Program of Study

There is no specific order for taking Humanities courses. Some courses listed below have prerequisites that can be found in their course description above. Some courses are no longer taught but students who completed the course already can use it toward a Humanities Program of Study.

| ACT Prep | Creative Writing |
| :---: | :---: |
| AP European History | Literature in Film |
| AP Psychology | Mythology |
| AP Seminar | Psychology SDC |
| AP Research | Tennessee History |
| Appalachian Studies | Yearbook |
| Fine Arts Program of Study |  |

These courses can work together toward a Program of Study in Fine Arts. More information can be found in the course descriptions above.

| Beginning Band | Heritage Singers | Percussion Ensemble | Visual Art II |
| :---: | :---: | :---: | :---: |
| Guitar \& String Instruments | Marching Band | Photography | Visual Art III |
| Concert Choir | Men’s Choir | Solo \& Ensemble | Visual Art IV |
| Digital Design I | Musical I | Symphonic Band | Web Design Foundations |
| Digital Design II | Musical/Choral Practicum | Theatre Arts | Wind Ensemble Honors |
| Digital Design III | Painting | Visual Art I | Women's Choir |
| General Music |  |  |  |

## Physical Education Program of Study

There is no specific order for taking Advanced Physical Education courses. More information can be found in the course descriptions above. Please note: Wellness is a graduation requirement for all students.

Physical Education II
Strength \& Conditioning Team Sports

