

LCHS Curriculum Guide 2021-2022

1233 Huntsville Highway Fayetteville, TN 37334 Guidance Department: (931) 438-1491

GENERAL INFORMATION

Lincoln County High School is committed to offering the very best in educational opportunities to all students. The courses included in this program of study are offered to students as choices to meet the requirements for high school graduation, preparation for post secondary training at any level, and preparation for the challenges of employment at the next level.

The basis for arriving at course selections may include (1) requirements, (2) degree of interest in subjects, (3) future plans for study or employment, (4) prerequisites and grades, (5) influential peer relationships which could affect scholastic achievements, (6) pre-registration. Each student will have the opportunity to select the subjects best suited for his/her individual needs and abilities. LCHS Administrators will place students in the appropriate level based on past placement and testing information if the student does not choose the appropriate level. Counselors and classroom teachers will be available to assist students in making wise educational and career choices.

Students and parents are advised to select courses with great care. Classes will be organized, teachers will be hired, and teacher assignments made based upon students requests. When the parents and student agree on course selections for the upcoming year, the parents and student will sign the registration form. The schedule must be followed for the upcoming designated school year. It is essential that parents understand that the student is contracting for those specific classes and will be expected to take them during the 2020-2021 school year without requesting changes. Changes in courses greatly affect class size and teacher assignments.

GRADUATION RECOGNITIONS

Graduation with Honors

Students will graduate with honors if they have a seven semester final average of 93.0 or above.

Graduation with State Honors

Students will graduate with state honors if they score at or above readiness benchmarks for all of the subject areas on the ACT or equivalent score on the SAT.

Graduation with Distinction

Students who attain a B average and complete at least one of the following will graduate with distinction:

- earn a nationally recognized industry certification
- participate in one of the Governor's Schools
- participate in one of the state's All State musical organizations
- be selected as a National Merit Finalist or Semi-Finalist
- attain a score of 31 or higher composite score on the ACT
- attain a score of 3 or higher on at least two advanced placement exams
- successfully complete the International Baccalaureate Diploma Program
- earn 12 or more semester hours of transcripted postsecondary credit

Work Ethic Distinction

Students who earn this distinction will be guaranteed an interview with partnering businesses and industries if they meet the other qualifications. In order to earn the distinction, students must earn a minimum of 20 points from the list of standards. Included in the list are absences, tardiness, discipline, being drug free, GPA, community service, and career readiness.

Tennessee Scholars

Tennessee Scholars is a workforce development, rewards and incentives honor for students who graduate high school with the required courses and additional expectations of attendance, discipline, and volunteer service. It is open to all students who qualify. Tennessee Scholars requirements are the minimum requirements one needs to prepare for college and career. The benefits are scholarships to many Universities, job preferential hiring, recognition at graduation, obtaining the distinction of being a scholar that will be on your permanent record for the rest of your life. *Chemistry is a required science for Tennessee Scholars eligibility.

Community Service Recognition

Students who complete and submit documentation of at least ten hours of community service each semester of high school will be recognized at the graduation ceremony.

STUDENT CLASSIFICATIONS

Sophomore 6 credits
Junior 10 credits
Senior 18 credits

GRADING/GPA INFORMATION

Grading Scale

A = 100 - 93 B = 92 - 85 C = 84 - 75 D = 74 - 70 F = Below 70

Grade Point Average

Grade Point Average (GPA) will be figured on semester grades 9-12 with calculations based on:

A = 4 B = 3 C = 2 D = 1 F = 0

Grade Reports

Report cards will be issued to students at the end of each 9 week grading period. Progress reports will be issued at the midpoint (4 $\frac{1}{2}$ weeks) of each 9 weeks grading period.

CLASS RANK

Valedictorian and Salutatorian

The method of determining Valedictorian and Salutatorian will be as follows:

- 1. All 9th, 10th, 11th, and 12th (1st semester only) grade scores will be used for purposes of computation
- 2. To be eligible a student must have been in attendance at Lincoln County High School for at least **three semesters**.

Class Rank will be computed on a weighted 4-point scale with additional weight of 0.5 for honors, dual enrollment and capstone industry certification courses, 0.75 for a statewide dual credit course and 1-point for Advanced Placement (AP) courses.

Students are ranked only on the courses listed on their Lincoln County High School schedule each year. In order for student ranking to be fair and consistent, additional post-secondary courses taken outside of the LCHS schedule will be reflected on the final transcript.

Regular Un-weighted		Weighted Honors/Dual Enrollment/Industry Cert	Weighted Statewide Dual	Advanced Placement		
Α	93-100 = 4.0	4.5	4.75	5.0		
В	85-92 = 3.0	3.5	3.75	4.0		
С	75-84 = 2.0	2.5	2.75	3.0		
D	70-74 = 1.0	1.5	1.75	2.0		
F	0-69 = 0	0	0	0		

Rigor points (3 for Honors, 4 for Dual Enrollment or industry certification aligned courses and 5 for Advanced Placement) will be assigned and will be added by the teacher of record to the final grade in each course.

Responsibility for Course Selection Needed to Graduate

Seniors—Each student who will be a senior next year has the responsibility to be certain that he/she is scheduled in all of the courses necessary to meet graduation requirements. School counselors will work in planning schedules to meet these requirements, but the final responsibility of taking all of the required courses rests with the student.

Minimum Academic Load

All students in grades nine through twelve will be required to register for a minimum of four units of credit per semester. Provided there are no scheduling conflicts, credit deficiency problems, or failures during the first six semesters, seniors may request to participate in Capstone courses both semesters of senior year.

Dual Enrollment

Students may participate in dual enrollment programs with neighboring colleges and universities if they gain permission from the principal and meet the college/university requirements. Students are responsible for registering and enrolling with the selected college/university. Check the college catalog or website for more information.

Move On When Ready

The Move on When Ready Act provides students the opportunity to graduate early and gain entry into a postsecondary institution. This path is only an option for *highly* motivated students. Please see your counselor for more information.

Credit Recovery

Credit recovery is an extended learning opportunity for students who have previously been unsuccessful in receiving course credit. Students will be assigned courses by their counselors and may work on credit recovery before and after school.

Four Year Plan/Focus Area

At the end of the eighth grade each student should have completed a four year plan. A 4-year plan is a guide that aids the student and the parent/s in ensuring graduation. Each year this plan will be reviewed and updated as necessary. Each student is required to have an elective focus. Courses will be written in the student's four-year plan.

TESTING

End of Course/TN Ready

End of Course exams will be administered at the completion of courses as determined by the Tennessee Department of Education. These exams will count as 15% of the final grade.

Biology U. S. History Geometry Algebra 1 Algebra 2 English 9 & 10

ACT

This test is mandatory for all 11th grade students. It will be given on a school day and scores will be reportable for college admission. There is no cost to the student for school day testing.

Advanced Placement Test

The AP subject area exams will be offered at the end of every year according to the College Boards schedule.

United State Civics Test

All students are given the US Civics test at the end of the US Government course.

PSAT/NMSQT

The PSAT will be offered in the fall semester for interested sophomores and juniors. This test will allow the student to qualify for the National Merit Scholarship.

STUDENTS & REVOKED DRIVER'S LICENSE

Driver's license will be revoked if a student:

- Has 10 consecutive unexcused absences in a semester
- OR Has 15 total unexcused absences in a semester
- OR doesn't earn 3 out of 4 credits in a semester

Reinstatement -- Driver's license may be reinstated after 30 days with no unexcused absences OR the student is passing 3 of 4 credits when the next report card is issued.

ATHLETIC ELIGIBILITY

TSSAA Athletic Eligibility Requirement

All student athletes must earn six (6) credits the preceding school year. All credits must be earned by the first day of the beginning of the school year. A student can gain eligibility at the end of the fall semester by earning three (3) credits but cannot lose eligibility at the end of the fall semester.

NCAA Division I & 2 or NAIA Eligibility Requirements

Any student who plans to enroll in college as a freshman and participate in intercollegiate athletics must be certified by the NCAA or NAIA Eligibility Clearinghouse. To be certified by the Clearinghouse, a student must meet several criteria. Students should apply for certification after their junior year if they are sure they wish to participate in intercollegiate athletics. Go online at www.ncaaclearinghouse.net or <a href="https://www.ncaaclearinghous

GRADUATION REQUIREMENTS

Credits	Courses					
4 English		English 9, 10, 11, & 12 An english class must be taken each school year.				
4	Math	Must include Algebra 1 & 2, Geometry, or its equivalent and a fourth higher-level course determined by the ACT Math score. A math class must be taken each school year.				
3	Science	Biology, Chemistry or Physics, and a third lab science				
3	Social Studies	World History or World Geography, US History, US Government (½), & Economics (½)				
1	Wellness	Wellness				
0.5	P.E.	P.E., Fitness Walking, or a SPORT				
0.5	Personal Finance	Personal Finance				
2*	Foreign Language	2 in same foreign language				
1*	Fine Art	May include visual art, instrumental music, vocal music, music appreciation, or theater arts				
3	Elective Focus	**see Career Clusters or Academic Clusters				
4	Elective Credit	Personal choice				
26	TOTAL CREDITS	Cohort 2020 and 2021				
28	TOTAL CREDITS	Cohort 2022 and beyond				

*The foreign language and fine art credits may be waived for students not planning to attend college, however the credits must be used to explore their elective focus of study.

Course Descriptions

ENGLISH

3001 English 9

Credit: 1

PREREQUISITE: English 8

DESCRIPTION: English I is a course that seeks to integrate the standards of language, communication, writing, research, logic, informational text, media, and literature. Students will work to comprehend and produce a wide variety of texts, including traditional works of literature, practical and persuasive forms of communication that involve speaking and listening skills, and the use of appropriate technology and media forms. The course will emphasize the communication and critical thinking skills that empower students to function effectively in a rapidly changing world. English I is a graduation requirement for all students. *The student will take the TN Ready Assessment at the end of the course.*

3001-H Honors English 9

Credit: 1

PREREQUISITE: Grade of 90 or above in 8th Grade English and teacher recommendation

DESCRIPTION: Honors English I is a course that seeks to integrate the standards of language, communication, writing, research, logic, informational text, media, and literature. Students will work to comprehend and produce a wide variety of texts, including traditional works of literature, practical and persuasive forms of communication that involve speaking and listening skills, and the use of appropriate technology and media forms. The course will emphasize the communication and critical thinking skills that empower students to function effectively in a rapidly changing world. English I is a graduation requirement for all students. *The student will take the TN Ready Assessment at the end of the course.*

3002 English 10

Credit: 1

PREREQUISITE: English 9

DESCRIPTION: The course consists of reading and analyzing literary and informational texts, as well as language and grammar study. This will include an emphasis on written and oral skills in various formats. Outside reading is required. The student will take the TN Ready Assessment at the end of the course.

3002-H Honors English 10

Credit: 1

PREREQUISITE: B average in English 9 or administrator approval

DESCRIPTION: Course content includes the study of grammar and usage, a cumulative vocabulary study, and a survey of world literature. Additional areas covered are seminal U.S. documents, composition, and research techniques. Outside reading is required. *The student will take the TN Ready Assessment at the end of the course.*

3003 English 11

Credit: 1

PREREQUISITE: English 10

DESCRIPTION: This course is a survey of American literature and fundamentals of grammar, spelling, vocabulary, and composition. Outside reading is required.

3003-H Honors English 11

Credit: 1

PREREQUISITE: B average in English 10 or administrator approval

DESCRIPTION: This course is a study of English grammar and usage, vocabulary, and research correlated with a survey of American literature for the college-bound student. Outside reading is required.

Credit: 1

PREREQUISITE: English 11

DESCRIPTION: English 12 is a study of grammar, composition, research, and British literature with vocabulary study. Outside reading is required.

3005-H Honors English 12

Credit: 1

PREREQUISITE: B average in English 11 or administrator approval

DESCRIPTION: Honors English 12 consists of review of grammar and usage, a college-level vocabulary study, and a survey of British literature supplemented with British history, world literature, composition, and research. Outside reading is required. At least one research paper is required.

3014 AP English Literature and Composition

Credit: 2 (1 English, 1 Elective)

PREREQUISITE: Honors English 11 or teacher recommendation

DESCRIPTION: The AP course in senior English is a college-level course meeting all year emphasizing the development of skills in critical reading of imaginative and discursive literature and in writing about literature and related ideas. The course includes all basic requirements of Honors English 12 plus major emphasis upon written and oral critical analyses of more than 20 novels and plays. Summer reading is required. The AP test will be offered in the spring. **AP Testing Fee**

MATHEMATICS

3102 Algebra I

Credit: 2

DESCRIPTION: Algebra I provides a formal development of the algebraic skills and concepts necessary for students to succeed in advanced courses. In particular, the instructional program in this course provides for the use of algebraic skills in a wide range of problem-solving situations. Other content includes: algebraic terminology, properties, linear functions, inequalities, exponents, radicals, polynomials, rational expressions, quadratic functions, probability, and statistics. Algebra I is a graduation requirement for all students. *The student will take the TN Ready Assessment at the end of the course.*

31021 Honors Algebra I

Credit: 1

PREREQUISITE: Grade of 90 or above in 8th Grade Pre-Algebra and teacher recommendation

DESCRIPTION: Honors Algebra I provides a formal development of the algebraic skills and concepts necessary for students to succeed in advanced courses. In particular, the instructional program in this course provides for the use of algebraic skills in a wide range of problem-solving situations. Other content includes: algebraic terminology, properties, linear functions, inequalities, exponents, radicals, polynomials, rational expressions, quadratic functions, probability, and statistics. Algebra I is a graduation requirement for all students. This course includes the same concepts taught in Algebra I but with more depth and rigor. *The student will take the TN Ready Assessment at the end of the course.*

3108 Geometry

Credit: 1

PREREQUISITE: Algebra I

DESCRIPTION: Geometry is the study of basic fundamental geometric relationships. Students will use algebra skills throughout the course with several concepts. These concepts can include parallel and perpendicular lines, right triangles and trigonometry, as well as, area and volume. Students explore other topics which will require the use of algebra periodically. These topics would include congruent and similar triangles, transformations and circles. The students use manipulatives and technology to help visualize the concepts and make real world connections. *The student will take the TN Ready Assessment at the end of the course.*

3108-H Honors Geometry

Credit: 1

PREREQUISITE: B average in Algebra I or administrator approval

DESCRIPTION: This course includes the same concepts taught in geometry but with more depth and rigor. <u>The student will take the TN Ready Assessment at the end of the course.</u>

3103 Algebra II

Credit: 1

PREREQUISITE: Algebra I and Geometry

DESCRIPTION: Algebra II is a study in intermediate Algebra. The course includes the study of linear equations and functions, matrices, graphing all basic functions with transformations, quadratic relations, logarithms, sequences, and probability, and statistics. Applications are emphasized throughout the course. *The student will take the TN Ready Assessment at the end of the course.*

3103-H Honors Algebra II

Credit: 1

PREREQUISITE: B average in Algebra I and Geometry

DESCRIPTION: This is a course for accelerated students. It is taught at a more in depth and advanced pace than Algebra II. This course prepares students for success in future advanced mathematics courses. Students will build on their work in Algebra I with linear, quadratic, and exponential functions, as well as, extend their repertoire of functions to include polynomial, rational, and radical functions. Students will work closely with the expressions that define the functions, and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. Other topics include: statistics & probability, matrices in three variables, factoring polynomials, sequences and series, and trigonometry. *The student will take the TN Ready Assessment at the end of the course.*

3181 Bridge Math

Credit: 1

PREREQUISITE: Algebra I & II, Geometry, & a score below 19 in math on the ACT

DESCRIPTION: This course is intended to build upon concepts taught in previous courses to allow students to gain a deeper knowledge of the real and complex number systems as well as the structure, use, and application of equations, expressions, and functions. Functions emphasized include linear, quadratic, and polynomial. Students will explore some elementary topics in probability and statistics. This course is recommended for students who have not scored a 19 or higher on the ACT by the beginning of senior year.

3181 Bridge/SAILS Math

Credit: 1

PREREQUISITE: Algebra I & II, Geometry, & a score below 19 in math on the ACT

DESCRIPTION: This course targets students that have not achieved the college readiness benchmark in math. Students completing the SAILS Math program may begin college in credit bearing courses. This course is intended to build upon concepts taught in previous courses to allow students to gain a deeper knowledge of the real and complex number systems as well as the structure, use, and application of equations, expressions, and functions. Functions emphasized include linear, quadratic, and polynomial. Students will explore some elementary topics in probability and statistics.

3136 Statistics (Dual Enrollment)

Credit: 1

PREREQUISITE: Algebra I, Geometry, Algebra II

DESCRIPTION: This course introduces the major concepts and tools for collecting, analyzing, and drawing conclusions from data. The major themes include: interpreting categorical and quantitative data, conditional probability and other rules of probability, using probability to make decisions, and making inferences and justifying conclusions.

3126 Pre-calculus

Credit: 1

PREREQUISITE: Algebra I, Geometry, Algebra II

DESCRIPTION: This course includes a study of functions and their graphs with emphasis on linear, quadratic, polynomial, rational, exponential, and logarithmic functions; equations, inequalities, and systems; matrices; sequences and series; and probability.

3126-H Honors Pre-calculus

Credit: 1

PREREQUISITE: Algebra I, Geometry, Algebra II with 88 or above average

DESCRIPTION: This course includes a study of functions and their graphs with emphasis on linear, quadratic, polynomial, rational, exponential, logarithmic, and trigonometric functions; equations, inequalities, and systems; conic sections; trigonometric applications of right and oblique triangles, linear and angular velocities, vectors, graphical representation of

trigonometric functions, inverse trigonometric functions, identities and conditional equations, composite angle formulas, and other selected topics.

3113 Honors Calculus

Credit: 1

PREREQUISITE: Pre-calculus

DESCRIPTION: Calculus is the study of functions with applications, and an introduction to differential calculus, with a laboratory component. Topics include a review of algebra and functions, mathematical modeling with elementary functions, rates of change, inverse functions, logarithms and exponential functions, derivative, differential equations, and basic integrals.

3127 AP Calculus

Credit: 2

PREREQUISITE: Pre-calculus

DESCRIPTION: An introduction to limits, differential and integral calculus. The AP test will be offered in the spring. **AP**

Testing Fee

SCIENCE

3202 Physical Science

Credit: 1

DESCRIPTION: A laboratory course that explores the relationship between matter and energy. Students explore physical science concepts through an inquiry approach integrated with appropriate algebra-based mathematics. Physical Science students investigate mathematics, energy, matter, motion, and forces, along with technology and engineering.

32021 Honors Physical Science

Credit: 1

PREREQUISITE: Grade of 90 or above in 8th Grade Science and teacher recommendation

DESCRIPTION: A more specialized approach to a laboratory course that explores the relationship between matter and energy. Students explore physical science concepts through an inquiry approach integrated with appropriate algebra-based mathematics. Physical Science students investigate mathematics, energy, matter, motion, and forces, along with technology and engineering.

3210 Biology

Credit: 1

DESCRIPTION: Biology is the study of living things. This course will provide a wide-based knowledge representing the various areas of biology. This course will cover aspects from cell process to how all organisms (plant and animal) work together in the environment. *The student will take the TN Ready Assessment at the end of the course.* **\$10 lab fee**

3210-H Honors Biology

Credit: 1

PREREQUISITE: B average in previous science class and teacher recommendation

DESCRIPTION: A more specialized approach to the study of living things for preparation of college-bound students who are especially interested in science. *The student will take the TN Ready Assessment at the end of the course.* **\$10 lab fee**

3217 AP Biology

Credit: 2 (1 Biology credit & 1 elective credit)

PREREQUISITE: Honors Biology and teacher recommendation

DESCRIPTION: The Advanced Placement Biology course is designed to be the equivalent of a college introductory biology course taken by biology majors during their first year. This course differs significantly from the usual high school biology course with respect to range and depth of topics covered, laboratory work performed and the time and effort required. AP Biology provides students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology and prepares the student to take the AP Biology Exam that is given in the spring. The AP test will be offered in the spring. **AP Testing Fee & \$10 per semester lab fee**

3221 Chemistry

Credit: 1

DESCRIPTION: Chemistry is a physical science in which the major emphasis is on changes in matter and energy relations that bring about the changes. This course will provide background for more advanced science studies. **\$10 lab fee**

3221-H Honors Chemistry

Credit: 1

PREREQUISITE: B average in prior science course or administrator approval

DESCRIPTION: This is an accelerated course in basic chemistry designed for the student who intends to major in a science related field in college. **\$10 lab fee**

3225 AP Chemistry

Credit: 2 (1 Chemistry credit & 1 elective credit)

PREREQUISITE: Honors Chemistry I and Algebra II

DESCRIPTION: The Advanced Placement Chemistry course is a rigorous class that follows a college-level general chemistry curriculum. Many topics from Honors Chemistry are covered as well as chemical equilibria, chemical kinetics, and thermodynamics. Extensive lab work is included. Students will be prepared to take the AP Chemistry Examination that may lead to college credit. The AP test will be offered in the spring. **AP Testing Fee & \$20 lab fee**

3231 Physics

Credit: 1

PREREQUISITE: Physical Science, Algebra 1, Geometry or corequisite Algebra 2 or above

DESCRIPTION: Physics is a lab science that examines the relationship between matter and energy. Topics that include mechanics, electricity, heat, light, and sound are examined through a student inquiry approach. Demonstrations and laboratory work are included.

3231-H Honors Physics

Credit: 1

PREREQUISITE: Physical Science, Algebra 2 or Precalculus and B average in previous science class **DESCRIPTION:** Honors Physics is a lab physical science that emphasizes matter and energy relationships quantitatively. Topics include mechanics, electricity, heat, light, and sound. Demonstrations and laboratory work are included. This course is intended for the student who plans to major in a STEM related field in college.

3251-H Honors-Anatomy & Physiology

Credit: 1

PREREQUISITE: B average in Honors/AP Biology and Chemistry and teacher recommendation

DESCRIPTION: This class is a college-prep class designed for the student who plans to receive an advanced medical degree. This class will consist of detailed study of the structure and function of the human body and extensive laboratory dissections. **\$30 lab fee**

SOCIAL STUDIES

3401 World History and Geography: The Industrial Revolution to the Contemporary World

Credit: 1

DESCRIPTION: Students will study the Age of Revolution 1750-1850; Industrial Revolution 1750-1914; Unification and Imperialism 1850-1914; World Wars 1914-1945; Cold War 1945-1989; and the Contemporary World Since 1989. World History and Geography is a graduation requirement for all students.

3401-H Honors World History and Geography: The Industrial Revolution to the Contemporary World Credit: 1

DESCRIPTION: A more specialized approach where students will study the Age of Revolution 1750-1850; Industrial Revolution 1750-1914; Unification and Imperialism 1850-1914; World Wars 1914-1945; Cold War 1945-1989; and the Contemporary World Since 1989. World History and Geography is a graduation requirement for all students.

3417 United States Government and Civics

Credit: ½

DESCRIPTION: In US Government and Civics, students will look at the founding principles of our U.S. Government, the three branches of government, and the basic skills needed to be participating citizens in our government. Students will understand the election process and discuss current events relevant to this class. All students will take the US Civics test during this course.

3417-H Honors United States Government and Civics

Credit: ½

DESCRIPTION: In Honors US Government and Civics, students will take an in-depth look at the founding principles of our U.S. Government, the three branches of government, and the basic skills needed to be participating citizens in our government. Students will understand the election process and discuss current events relevant to this class. Students can expect a reading or writing assignment every day. All students will take the US Civics test during this course. **Honors Government cannot be taken as an elective after AP Government has already been taken.**

3445 AP United States Government and Politics

Credit: 1

Prerequisite: Teacher Approval

DESCRIPTION: A.P. United States Government and Politics is a course that will provide students with an analytical approach to government and politics in the United States. Students will develop a critical understanding of the American political system, as well as their rights and responsibilities as citizens. Students will develop the ability to analyze and interpret data related to the United States government and American political behavior. The purpose of this course is to prepare students to take the A.P. United States Government Exam. This course will be taught on a college level, and requires a substantial amount of preparation for every class. Students will have nightly homework assignments that require critical and evaluative thinking and writing. Students must be willing to devote time at home to study in order to succeed. All students will take the US Civics test during this course. The AP test will be offered in the spring. **AP Testing Fee**

3416 United States History and Geography

Credit: 1

DESCRIPTION: This is a general survey course of United States history starting with Reconstruction and continuing to the present. Emphasis is divided among political, social, and economic aspects. *The student will take the TN Ready Assessment at the end of the course.*

3416-H Honors United States History and Geography

Credit: 1

PREREQUISITE: B average in prior history course or administrator approval

DESCRIPTION: This is a general survey course of the history of the United States starting with Reconstruction and continuing to the present. This is not only a lecture course but involves outside readings, analysis, and discussion of cause and effect. The student will take the TN Ready Assessment at the end of the course.

3440 AP American History

Credit: 2 (1 American History credit and 1 elective credit)

PREREQUISITE: B average in prior history or administrator approval

DESCRIPTION: A.P. American History is a college level course that consists of lecturing and extensive outside reading. This class starts with early exploration and continues to the present. Student requirements include an outside reading list, books to read during the school year, and several papers on various topics. The AP test will be offered in the spring. **AP Testing Fee**

3441 AP European History

Credit: 2 (1 World History credit and 1 elective credit)

DESCRIPTION: AP European History is an introductory college-level European history course. Students cultivate their understanding of European history through analyzing historical sources and learning to make connections and craft historical arguments as they explore concepts like the interaction of Europe and the world; economic and commercial developments; cultural and intellectual developments; states and other institutions of power; social organization and development; national and European identity; and technological and scientific innovation. The AP test will be offered in the spring. **AP Testing Fee**

3431 Economics

Credit: ½

DESCRIPTION: Economics is the study of how people, businesses, and governments choose to use resources. In this course, students will understand the basic principles of macroeconomics and microeconomics. Students will analyze economic concepts that involve the individual consumer, the small business owner, large companies; and countries participating in the global economy. Students will use charts, graphs, tables, and other resources to interpret and apply the information they are learning.

3435 Contemporary Issues

Credit: 1

DESCRIPTION: This course will focus on issues locally, statewide, nationally, and worldwide that are of timely importance. The course will stress the importance of knowledge of these events, and their immediate and long-range effects, as well as critical thinking skills in the areas of investigation, examination, and analysis of issues and events. The treatment of these events and issues by print, television, and radio media will be examined.

3496 Personal Finance

Credit: ½

DESCRIPTION: Personal Finance is a foundation course designed to provide an understanding for making informed personal financial decisions. Real world topics covered include income, money management, spending and credit, saving and investing. Students will design personal and household budgets; simulate use of checking and saving accounts; demonstrate knowledge of finance, debt, and credit management; evaluate and understand insurance and taxes.

FOREIGN LANGUAGES

3021 Spanish 1

Credit: 1

DESCRIPTION: Spanish 1 provides students with a solid base in grammar structures and teaches essential vocabulary for communication. A special emphasis is placed on communication skills, such as asking and answering simple questions, and on correct pronunciation. In addition, students will learn basic sentence construction and reading strategies. Some aspects of Hispanic culture are studied as well.

3022 Spanish 2

Credit: 1

PREREQUISITE: Spanish 1

DESCRIPTION: Spanish 2 is a continuation of Spanish 1. More complicated grammar structures will be addressed as well as a continuing emphasis on expanding the student's usable vocabulary. Communication will be emphasized, including dialogues and paired conversations. In addition, there will be an expanded study of Hispanic culture.

3023 Honors Spanish 3

Credit: 1

PREREQUISITE: At least a B average in Spanish 2 and enrolled in Honors English

DESCRIPTION:Honors Spanish 3 is a course devoted to using the Spanish learned in levels one and two. Four essential skills in a foreign language will be used: writing, reading, speaking, and listening. Also, students will learn more advanced grammatical structures and additional vocabulary. Students will read a novel in Spanish, chosen by the teacher, and be prepared to discuss it in class (in the target language).

3024 Honors Spanish 4

Credit: 1

PREREQUISITE: A in Honors Spanish 3 and enrolled in Honors English

DESCRIPTION: Honors Spanish 4 will be taught and conducted entirely in Spanish. Students should expect to be able to use the Spanish they have learned in levels 1-3. Students will read a novel in Spanish, chosen by the teacher, and be prepared to discuss it in class (in the target language).

FINE ARTS

3501 Art I

Credit: 1

DESCRIPTION: Art I emphasizes the fundamentals of design, the history and criticism of past art form. Studio projects place emphasis on two-dimensional projects. introductory drawing and painting skills are taught. \$25 fee

3502 Art II

Credit: 1

PREREQUISITE: B average in Art I & teacher recommendation

DESCRIPTION: Art II places emphasis on the production of art in the areas of drawing, painting, and mixed medium. Good design and craftsmanship are stressed as well as participation in open critiques with peers and instructor. The history of contemporary art forms is also part of this curriculum. \$30 fee

3503 Art III

Credit: 1

PREREQUISITE: B average in Art II & teacher recommendation

DESCRIPTION: Art III places emphasis on the production of art in the areas of drawing, painting and mixed medium. Good design and craftsmanship are stressed as well as exploration of mediums and in depth critiques. The history of contemporary art forms is also part of this curriculum. \$30 fee

3545 AP Studio Art 2-D

Credit: 1

PREREQUISITE: B Average in Art I & II and teacher recommendation

DESCRIPTION: AP Art 2D design is a course for students who are seriously interested in the practical and advanced applications and experiences of art making and criticism. AP Studio Art is not based on a written exam; instead, students submit a formal portfolio comprised of 22 high quality works of art created during the semester for review and grading by a professional group of artists. Students may receive college credit for this course if their portfolio generates a passing score. \$30 fee & AP Testing Fee

3520 Theater Arts I

Credit: 1

DESCRIPTION: An introduction to the art of theater which includes studying, researching, critiquing, creating, designing, performing, and participating in a variety of theatre-based learning experiences as well as exploring the theatre's significance and influence on society. The course will include instruction in performance and design techniques, style, and history.

3521 Theater Arts II

Credit: 1 credit

PREREQUISITE: B or higher Theater Arts I

DESCRIPTION: An in-depth study of theatre arts, to include performance-based experiences while using appropriate technology and media. This course will include critical thinking, creativity, and aesthetic perception and will reinforce skills in leadership and collaboration.

3522 Theater Arts III

Credit: 1

PREREQUISITE: B or higher in Theater Arts II

DESCRIPTION: An in-depth study of set design, set construction, lighting, makeup, and costuming as it relates to stage and film. The course also includes techniques of stage direction and character study.

3523 Theater Arts IV

Credit: 1

PREREQUISITE: B or higher in Theater Arts III

DESCRIPTION: A continuation of Theater III, with focus on set design, set construction, lighting, makeup, and costuming as it relates to stage and film. The course also includes techniques of stage direction and character study.

3566 Instrumental Music I (Fall & Spring)

Credit: 2

PREREQUISITE: Open to all students who have at least one (1) year of previous band experience.

DESCRIPTION: This is a class that deals with the development of a marching show and affiliated music to be performed at events including football games, contests, parades, and other functions at the director's discretion. Emphasis is placed on fundamental marching concepts, performance, teamwork and outstanding performances. This class will also develop concert literature and small chamber ensembles for music to be performed for winter and spring concerts. Students enrolled in this class will be eligible for various honor bands throughout the year. Students will learn basic music theory including scales, music literature, composition, and performance. **Frequent travel is required throughout the duration of this course. Rehearsals and performances will be required that occur outside the school day. Band students will be transported by bus to LCHS for the last class period of the day. There are fees associated with this course and students will attend summer band camp.**

3505 General Music (Instrumental/Band and History)

Credit: 1

DESCRIPTION: This course is an intensive and comprehensive study of music literacy and history. Students will learn to read, produce, and evaluate music from various time periods, as well as develop an understanding of music as it relates to history, culture and other disciplines. During this course, students will perform a varied repertoire of music on traditional concert band and percussion instrument. Additional topics include instrument care and maintenance, ear training, introductory music theory, and composition. This class is a performance-based class and can be a prerequisite for Marching Band or Concert Band.

3570 Vocal Music I

Credit: 1

DESCRIPTION: This performance based class serves as a developmental course for beginning and intermediate level vocal music students. Students will be given an introduction in the proper use of the singing voice, emphasizing proper tone placement and breath support, as well as sight singing and music reading skills **NO SOLO SINGING WILL BE REQUIRED**. The repertoire will be chosen from many genres: seasonal, sacred, and secular. All performances will be part of the course grade. **Several out of school rehearsals and performances will be required and will be a part of the course grade.**

3531-AD Advanced Vocal Music

Credit: 2

PREREQUISITE: Vocal Music I and Director's Approval

DESCRIPTION: This performance based class is an advanced course for vocal music students that meets for the entire school year. It provides students the opportunity to study and explore advanced vocal techniques, as well as, instruction and performance of advanced choral literature. Purchase of choral uniforms will be required for performances. **Several out of school rehearsals and performances will be required and will be part of the course grade. \$30 fee**

PE-WELLNESS-DRIVER EDUCATION

3303 Lifetime Wellness

Credit: 1

DESCRIPTION: Topics include disease prevention, mental health, nutrition, personal fitness, safety & first aid, sexuality and family life, substance use and abuse.

3301-9 Physical Education (P.E)

Credit: ½ (can take two 9 weeks for 1 credit)

DESCRIPTION: This course will include a variety of sports and physical activities.

3302-FW9 Fitness Walking

Credit: ½ (can take two 9 weeks for 1 credit)

DESCRIPTION: Emphasis on walking to improve physical condition.

3321 Driver Education

Credit: ½

DESCRIPTION: This course is designed to provide training to students to reinforce the basic skills and the fundamental rules for safe driving. Driver Education consists of classroom instruction and behind-the-wheel training. **\$25 fee**

ATHLETICS

3302 Basketball Conditioning

Credit: 2

DESCRIPTION: This course will include conditioning for basketball. Male and female teams will be separated.

3302 Football Conditioning

Credit: 2

DESCRIPTION: This course will include conditioning for football. Seniors will only take this during the fall semester.

3302 Softball Conditioning

Credit: 1

DESCRIPTION: This course will include conditioning for softball.

3302 Baseball Conditioning

Credit: 1

DESCRIPTION: This course will include conditioning for baseball.

3302 Volleyball Conditioning

Credit: 1

DESCRIPTION: This course will include conditioning for volleyball. The second nine weeks can be used for government and ACT Prep.

Career Clusters

ADVANCED MANUFACTURING

FOCUS AREAS—Take courses in order listed

Machining Technology

5922 Principles of Manufacturing

5929 Principles of Machining I

5923 Dual Enrollment Machining (TCAT

Shelbyville)

6105 Work Based Learning

Mechatronics

5922 Principles of Manufacturing

6053 Digital Electronics

4063 DE – Mechatronics I (Motlow)

4063 DE – Mechatronics II (Motlow)

6105 Work Based Learning

Welding

5922 Principles of Manufacturing

6078 Welding I

6033 Welding II

4062 DE Welding I (TCAT Pulaski)

4161 DE Welding II (TCAT Pulaski)

4163 DE Welding III (TCAT Pulaski)

4164 DE Welding IV (TCAT Pulaski)

6105 Work Based Learning

5922 Principles of Manufacturing

Credit: 1

DESCRIPTION: Principles of Manufacturing focuses on the essential principles that must be mastered for a person to be effective in manufacturing production work. The course is intended for students who are interested in production that integrates machining and engineering. The course covers professional communications with customers, quality principles and processes, systems, information in the workplace, the process of product design to machine parts, and statistical process control. The course is contextual by design. It connects what is being learned to the learner's current experience, past knowledge, and future conduct. Wherever possible, real-world or simulation hands-on experiences become the context in which instruction is delivered.

5929 Principles of Machining I

Credit: 1

PREREQUISITE: Principles of Manufacturing.

DESCRIPTION: Principles of Machining I focuses on the essential principles that must be mastered for a person to be effective in manufacturing production work. The course is intended for students who are interested in production that integrates machining and engineering. The course covers professional communications with customers, quality principles and processes, systems, information in the workplace, the process of product design to machine parts, and statistical process control. The course is contextual by design. It connects what is being learned to the learner's current experience, past knowledge, and future conduct.

5923 Dual Enrollment Machining TCAT Shelbyville

Credit: 2

PREREQUISITE: Principles of Machining I

DESCRIPTION: Principles of Machining II is an advanced level contextual course that builds on the introductory skills learned in the entry-level manufacturing and machining courses, stressing the concepts and practices in a production environment supported by advanced machining and engineering facilities. Working with the course instructor and team members in a cooperative learning environment, students will design, produce, and maintain products that are defined by

detailed technical specifications. Emphasis is placed on quality control, safety and engineering codes and standards, and production-grade machining systems, building on the learner's past knowledge, current experiences, and future conduct as a career machinist. This course is dual-enrolled with TCAT Shelbyville but will be taught at LCHS.

6053 Digital Electronics

Credit: 1

DESCRIPTION: Digital Electronics provides a foundation for students who are interested in electrical engineering, electronics, or circuit design. Students study topics such as combinational and sequential logic and are exposed to circuit design tools used in industry, including logic gates, integrated circuits, and programmable logic devices.

4063 DE Mechatronics I

Credit: 1

DESCRIPTION: This course is a study of the basic electrical components in a mechatronics system. Topics covered will include basic functions and physical properties of electrical components; the systematic flow of energy and measurement of components; troubleshooting techniques and strategies to identify, localize and correct malfunctions; and systematic preventive maintenance and electrical component safety. Technical documentation such as data sheets, schematics, timing diagrams and system specifications will also be covered. This course is dual enrolled with Motlow-Fayetteville and is taught on the Motlow-Fayetteville campus.

4063 DE Mechatronics II

Credit: 1

DESCRIPTION: This course is a study of the basic mechanical components and electrical drives in a mechatronics system. Topics covered will include basic functions and physical properties of mechanical components and electrical AC and DC drives; materials, lubrication requirements and surface properties; troubleshooting techniques and strategies to identify, localize and correct malfunctions; and systematic preventative maintenance and electrical component safety. Technical documentation such as data sheets and specifications of mechanical elements and electrical drives will also be covered. This course is dual enrolled with Motlow-Fayetteville and is taught on the Motlow-Fayetteville campus.

6078 Welding I

Credit: 1

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

6033 Welding II

Credit: 2

PREREQUISITE: Welding I and teacher recommendation

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

4062 DE Welding I

Credit: 1

PREREQUISITE: Welding I and teacher recommendation

DESCRIPTION: Students in this course will begin building hours for the Welding Technology Program at TCAT Pulaski. Students may take this course even if they do not plan to attend TCAT Pulaski. Students that choose to continue in the program upon graduation will be able to apply their earned hours to the Welding Technology Program. The mission of the Industrial Welding Technology Program is designed to prepare students for a career in welding using the various welding processes such as MIG, TIG, and Arc welding. The individualized, competency-based instruction provides for both classroom instruction and practical hands-on experience using tools and state of the art welding equipment. Several certificates are offered in this program as well as a Combination Welder Diploma. This course is dual enrolled with TCAT Pulaski but is taught on the LCHS campus.

4161 DE Welding II

Credit: 1

PREREQUISITE: DE Welding I and teacher recommendation

DESCRIPTION: Students in this course will begin building hours for the Welding Technology Program at TCAT Pulaski. Students may take this course even if they do not plan to attend TCAT Pulaski. Students that choose to continue in the program upon graduation will be able to apply their earned hours to the Welding Technology Program. The mission of the Industrial Welding Technology Program is designed to prepare students for a career in welding using the various welding processes such as MIG, TIG, and Arc welding. The individualized, competency-based instruction provides for both classroom instruction and practical hands-on experience using tools and state of the art welding equipment. Several certificates are offered in this program as well as a Combination Welder Diploma. This course is dual enrolled with TCAT Pulaski but is taught on the LCHS campus.

4162 DE Welding III

Credit: 1

PREREQUISITE: Welding II and teacher recommendation

DESCRIPTION: Students in this course will begin building hours for the Welding Technology Program at TCAT Pulaski. Students may take this course even if they do not plan to attend TCAT Pulaski. Students that choose to continue in the program upon graduation will be able to apply their earned hours to the Welding Technology Program. The mission of the Industrial Welding Technology Program is designed to prepare students for a career in welding using the various welding processes such as MIG, TIG, and Arc welding. The individualized, competency-based instruction provides for both classroom instruction and practical hands-on experience using tools and state of the art welding equipment. Several certificates are offered in this program as well as a Combination Welder Diploma. This course is dual enrolled with TCAT Pulaski but is taught on the LCHS campus.

4163 DE Welding IV

Credit: 1

PREREQUISITE: DE Welding III and teacher recommendation

DESCRIPTION: Students in this course will begin building hours for the Welding Technology Program at TCAT Pulaski. Students may take this course even if they do not plan to attend TCAT Pulaski. Students that choose to continue in the program upon graduation will be able to apply their earned hours to the Welding Technology Program. The mission of the Industrial Welding Technology Program is designed to prepare students for a career in welding using the various welding processes such as MIG, TIG, and Arc welding. The individualized, competency-based instruction provides for both classroom instruction and practical hands-on experience using tools and state of the art welding equipment. Several certificates are offered in this program as well as a Combination Welder Diploma. This course is dual enrolled with TCAT Pulaski but is taught on the LCHS campus.

6105 Work Based Learning

Credit: 1 or 2

PREREQUISITE: Jr. or Sr. who has completed 2 credits in focus area and has completed or is enrolled in a third. **DESCRIPTION:** Work-based learning (WBL) is a proactive approach to bridging the gap between high school and high-demand, high-skill careers in Tennessee. Students build on classroom-based instruction to develop employability skills that prepare them for success in postsecondary education and future careers. Through experiences like internships, apprenticeships, and paid work experience, juniors and seniors (16 years or older) may earn high school credit for capstone WBL experiences. Students who fail a class during the fall semester and/or do not have satisfactory attendance and behavior will not be allowed to participate in Work Based Learning.

AGRICULTURE, FOOD & NATURAL RESOURCES

FOCUS AREAS—Take courses in order listed

Veterinary and Animal Science

5957 Agriscience

5958 Small Animal Science

6116 Large Animal Science

5961 Veterinary Science

4065 DE Motlow Animal Science for Agriculture 1020

4065 DE Motlow Farm Animal Disease 2340

5964 Supervised Ag Experience

6105 Work Based Learning

Agricultural Engineering and Applied Technologies

5957 Agriscience

5944 Principles of Agricultural Mechanics

5945 Agricultural Power and Equipment

5963 Ag Fabrication and Biosystems Engineering

5964 Supervised Ag Experience

6105 Work Based Learning

Horticulture Sciences

5957 Agriscience

6119 Principles of Plant Science and Hydroculture

5954 Greenhouse Management

5951 Landscaping and Turf Science

4069 DE Motlow Plant Science for Horticulture 1020

5964 Supervised Ag Experience

6105 Work Based Learning

5957 Agriscience

Credit: 1

DESCRIPTION: 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 serves in the 21st century. In addition, it serves as the first course for all programs of study in the Agriculture, Food and Natural Resources Cluster. This course counts as a lab science credit toward graduation and college entrance requirements. (Can be used as the third lab science)

5958 Small Animal Science

Credit: 1

PREREQUISITE: Agriscience

DESCRIPTION: Small Animal Science is an applied 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 anatomy and physiological systems of different groups of small animals, as well as careers, leadership, and history of the industry.

6116 Large Animal Science

Credit: 1

PREREQUISITE: Small Animal

DESCRIPTION: Large Animal Science 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 anatomy and physiological systems of different groups of large animals such as horses, cows, swine, sheep and goats, as well as careers, leadership, and history of the industry. Dual Enrollment Options Exist

5961 Veterinary Science

Credit: 1

PREREQUISITE: Small Animal Science and Large Animal Science

DESCRIPTION: Veterinary Science is an advanced 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 principles of health and disease, basic animal care and nursing, clinical and laboratory procedures, and additional industry-related career and leadership knowledge and skills. Dual Credit/Enrollment Options Exist

4069 DE Motlow Animal Science for Agriculture 1020

Credit: 1

PREREQUISITE: Qualify for Motlow Dual Enrollment

DESCRIPTION: This course is a study of animals in agriculture: body systems and development, principles of inheritance, fundamentals of feeding, and the function of farm animals, the function of farm animals, animal sanitation, animal products, and the relationship to public health.

4069 DE Motlow Farm Animal Disease 2340

Credit: 1

PREREQUISITE: Qualify for Motlow Dual Enrollment

DESCRIPTION: This course is a study of commonly encountered diseases of farm animals (horses, cattle, sheep, hogs, and poultry), description of the diseases, pathogenesis, signs, and treatments. Special emphasis is placed on the on-farm recognition, prevention, and lay person treatment of farm animal diseases.

5944 Principles of Agricultural Mechanics

Credit: 1

PREREQUISITE: Agriscience

DESCRIPTION: Principles of Agricultural Mechanics covers topics including project management, basic engine and motor mechanics, land surveying, irrigation and drainage, agricultural structures, and basic metalworking techniques.

5954 Agricultural Power and Equipment

Credit: 1

PREREQUISITE: Ag Mechanics

DESCRIPTION: Agricultural Power and Equipment is an applied-knowledge 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.

5963 Agricultural Fabrication and Biosystems Engineering

Credit: 1

PREREQUISITE: Ag Power and Equipment

DESCRIPTION: Agricultural and Biosystems Engineering is a capstone course that prepares students for further study or careers in engineering, environmental science, agricultural design and research, and agricultural mechanics. Special emphasis is given to the many modern applications of Geographic Information Systems (GIS) and Global Positioning Systems (GPS) to achieve various agribusiness goals. Dual Credit Options Exist

6119 Principles of Plant Science and Hydroculture

Credit: 1

PREREQUISITE: Greenhouse Mgt

DESCRIPTION: Plant and Soil Science is an applied-knowledge course focusing on the science and management of plants and soils with special attention and knowledge to be successful in science- or agriculture-related occupations. Students in this course will be exposed to a range of careers associated with the science and management of plants and soils and will develop the essential skills. Dual Enrollment Options Exist

5954 Greenhouse Management

Credit: 1

PREREQUISITE: Agriscience

DESCRIPTION: Greenhouse Management is an applied-knowledge course designed to prepare students to manage greenhouse operations. This course covers principles of greenhouse structures, plant health and growth, growing media, greenhouse crop selection and propagation, and management techniques. It provides students with the technical knowledge and skills needed to prepare for further education and careers in horticulture production. Greenhouse Management is a dual credit course with statewide articulation. Dual Credit/Enrollment Options Exist

5951 Landscaping and Turf Science

Credit: 1

PREREQUISITE: Greenhouse

DESCRIPTION:

4069 DE Motlow Plant Science for Agriculture 1020

Credit: 3 course hours

PREREQUISITE: Qualify for Dual Enrollment with Motlow

DESCRIPTION: This course is a study of plant structure and the physiology, heredity, and environment in relation to growth adaptation, and management of crops.

6105 Work Based Learning

Credit: 1 or 2

PREREQUISITE: Jr. or Sr. who has completed 2 credits in the focus area and has completed or is enrolled in a third.

DESCRIPTION: Work-based learning (WBL) is a proactive approach to bridging the gap between high school and high-demand, high-skill careers in Tennessee. Students build on classroom-based instruction to develop employability skills that prepare them for success in postsecondary education and future careers. Through experiences like internships, apprenticeships, and paid work experience, juniors and seniors (16 years or older) may earn high school credit for capstone WBL experiences. Students who fail a class during the fall semester and/or do not have satisfactory attendance and behavior will not be allowed to participate in Work Based Learning.

ARCHITECTURE AND CONSTRUCTION

FOCUS AREAS-- Take courses in order listed, if possible

Mechanical, Electrical, & Plumbing Systems

6073 Fundamentals of Construction (1 semester)

6161 MEP Systems

6075 Electrical Systems

4074 Dual Enrollment Electrical (TCAT Pulaski)

6105 Work Based Learning

6073 Fundamentals of Construction (1 semester)

Credit: 1

PREREQUISITE: None

DESCRIPTION: Fundamentals of Construction is a foundational course in the Architecture and Construction cluster covering essential knowledge, skills, and concepts required for the various 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.

6161 MEP Systems (Mechanical, Electrical, & Plumbing Systems)

Credit: 1

PREREQUISITE: Fundamentals of Construction

DESCRIPTION: Mechanical, Electrical, & Plumbing Systems prepares students for electrical, plumbing, and HVAC careers by introducing students to the physical principles of these systems and the fundamental skills needed to work with them. Upon completion of this course, proficient students will be able to follow safety procedures and use tools to perform basic operations with electrical circuits, as well as demonstrate understanding in fundamental concepts of electricity theory (i.e. Ohm's Law). Students will be able to apply proper tools and procedures to perform basic operations with plastic piping, including measuring, cutting, and joining pipe. Furthermore, students will be able to apply mathematics concepts to solve HVAC, electrical, and plumbing problems. 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.

6075 Electrical Systems

Credit: 1

PREREQUISITE: MEP Systems and Fundamentals of Construction

DESCRIPTION: Electrical Systems prepares students for careers as electricians across a variety of residential and commercial environments. Upon completion of this course, proficient students will be able to implement safety procedures and tools to perform operations with device boxes, conduit, raceway systems conductors, and cable. Students will read and interpret the National Electrical Code, drawings, specifications, and diagrams to determine materials and procedures needed to complete a project. Students will calculate residential loads to recommend electrical hardware. Standards in this course also introduces basic troubleshooting procedures and power systems, and expand on principles of the construction industry, delving deeper into 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.

4074 Dual Enrollment Electrical

Credit: 2-4

PREREQUISITE: MEP Systems and Fundamentals of Construction

DESCRIPTION: Students in this course will begin building hours for the Electrical and Plumbing Construction Technology Program at TCAT Pulaski. Students may take this course even if they do not plan to attend TCAT Pulaski. Students that choose to continue in the program upon graduation will be able to apply their earned hours to the Electrical and Plumbing Technology Program. The purpose of the Electrical and Plumbing Technology Program is to prepare students for a career as an electrician and/or plumber in the fast growing construction industry. Graduates of the Electrical and Plumbing Construction Technology program will possess a number of valuable skills such as electrical theory, residential/commercial print reading and wiring techniques, load calculations, conduit bending, National Electric Code, plumbing fixtures and installation, pipes and fittings, water distribution and drainage installations. Training includes both classroom (theory) and hands-on lab assignments designed to allow students to demonstrate the mastery of the core skills required for employment in the electrical and plumbing field. This course is dual enrolled with TCAT Pulaski but is taught on the LCHS campus.

6105 Work Based Learning

Credit: 1 or 2

PREREQUISITE: Jr. or Sr. who has completed 2 credits in focus area and has completed or is enrolled in a third. **DESCRIPTION:** Work-based learning (WBL) is a proactive approach to bridging the gap between high school and high-demand, high-skill careers in Tennessee. Students build on classroom-based instruction to develop employability skills that prepare them for success in postsecondary education and future careers. Through experiences like internships, apprenticeships, and paid work experience, juniors and seniors (16 years or older) may earn high school credit for capstone WBL experiences. Students who fail a class during the fall semester and/or do not have satisfactory attendance and behavior will not be allowed to participate in Work Based Learning.

BUSINESS MANAGEMENT & ADMINISTRATION

FOCUS AREAS-- Take courses in order listed, if possible

Business Management

5905 Introduction to Business & Marketing

5888 Business Communications

5889 Business Management

6105 Work Based Learning

OFFICE MANAGEMENT

5891 Computer Applications

5888 Business Communications

5904 DE Advanced Computer Applications (TCAT Pulaski)

6105 Work Based Learning

5891 Computer Applications

Credit: 1

DESCRIPTION: Computer Applications is a foundational course intended to teach students the computing fundamentals and concepts involved in the proficient use of common application software. Upon completion of this course, students will gain basic proficiency in word processing, spreadsheets, databases, and presentations. In addition, students will have engaged in key critical thinking skills and will have practiced ethical and appropriate behavior required for the responsible use of technology.

5888 Business Communications

Credit: 1

PREREQUISITE: Computer Applications or Introduction to Business and Marketing

DESCRIPTION: Business Communications is a course that prepares students for oral and electronic business communications in the 21st century including social media as well as developing skills in electronic publishing, design, and

digital communications. Students will review and practice successful styles and methods for professional business communications using the proper tools to deliver effective publications and presentations.

5889 Business Management

Credit: 1

PREREQUISITE: Introduction to Business and Marketing

DESCRIPTION: This course 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, will present recommendations to improve an existing business. Local business partnerships are encouraged to provide resources for faculty and students. Proficient students will be able to complete a full review of an existing business and offer recommendations for improvement as would a management consultant.

5904 Dual Enrolled Advanced Computer Applications

Credit: 1

PREREQUISITE: Computer Applications

DESCRIPTION: Advanced Computer Applications prepares students to continue postsecondary training in business-related programs, provides advanced training for students pursuing a career in administrative and information support, and supports, obtaining an industry certification in specific software applications (such as the Microsoft Office Suite). Course content and projects are meant to simulate workplace scenarios and draw on skills related to communications, operations, management, and teamwork in order to accomplish information management goals. Upon completion of this course, proficient students will be fluent in a variety of information management software applications and will be prepared to sit for the Microsoft Office Specialist (MOS). This course is dual enrolled with TCAT Pulaski but is taught on the LCHS campus.

5905 Introduction to Business & Marketing

Credit: 1

DESCRIPTION: 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 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 pathway they would like to pursue in high school.

6105 Work Based Learning

Credit: 1 or 2

PREREQUISITE: Jr. or Sr. who has completed 2 credits in focus area and has completed or is enrolled in a third. **DESCRIPTION:** Work-based learning (WBL) is a proactive approach to bridging the gap between high school and high-demand, high-skill careers in Tennessee. Students build on classroom-based instruction to develop employability skills that prepare them for success in postsecondary education and future careers. Through experiences like internships, apprenticeships, and paid work experience, juniors and seniors (16 years or older) may earn high school credit for capstone WBL experiences. Students who fail a class during the fall semester and/or do not have satisfactory attendance and behavior will not be allowed to participate in Work Based Learning.

HEALTH SCIENCE

FOCUS AREAS-- Take courses in order listed, if possible

Diagnostic Services
5998 Health Science Education
5994 Diagnostic Medicine
5991 Anatomy and Physiology
6105 Work Based Learning

Nursing Services

5998 Health Science Education

5999 Medical Therapeutics

5991 Anatomy and Physiology

6000 Nursing Education or 4099 DE Nursing Services

6105 Work Based Learning

Therapeutic Services

5998 Health Science Education

5999 Medical Therapeutics

5991 Anatomy and Physiology

6105 Work Based Learning

Sport and Human Performance

5998 Health Science Education

5990 Rehabilitation Careers

5991 Anatomy and Physiology

6105 Work Based Learning

5998 Health Science Education

Credit: 1

DESCRIPTION: Health Science Education is an introductory course designed to prepare students to pursue careers in the fields of public health, therapeutics, health informatics, 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 healthcare skills. This course will serve as a strong foundation for all of the Health Science programs of study.

5994 Diagnostic Medicine

Credit: 1

PREREQUISITE: Health Science Education

DESCRIPTION: Diagnostic Medicine creates a picture of an individual's health status at a single point in time. This could include following careers and career areas: audiologist, cardiology, imaging, medical laboratory, radiography, nuclear medicine, stereotactic radiosurgery, cytotechnology, clinical laboratory technician, pathologists, medical physician, histotechnologist.

5991 HS-Anatomy & Physiology

Credit: 1

PREREQUISITE: Health Science Education & Biology 3210

DESCRIPTION: 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 apply the gross anatomy from earlier courses to a deeper understanding of all body systems, (1) identify the organs and structures of the support and movement systems, (2) relate the structure and function of the communication, control, and integration system, and (3) demonstrate a professional, working understanding of the transportation, respiration, excretory, and reproduction systems.

5999 Medical Therapeutics

Credit: 1

PREREQUISITE: Health Science Education

DESCRIPTION: This course provides the knowledge and skills to maintain or change to the health status of an individual over time. This could include such careers or career areas as dental, dietetics, medical assistance, home health, nursing, pharmacy, respiratory, social work, nutritionist, physician, psychiatrist, psychologist, veterinarian, gerontology service provider, medical practice owner, attorney for health care

6000 Nursing Education

Credit: 1

PREREQUISITE: Health Science Education and Medical Therapeutics and Anatomy & Physiology **DESCRIPTION:** Nursing Education consists of 18 units of study dealing with direct bedside nursing care. Clinical

experience will consist of supervised practice in the nursing home, as well as demonstrations in the classroom. Students can be registered by the Tennessee Department of Health—after the completion of the course, 100 hours clinical and theory, passing a state test (both written and skills)—and will be job ready.

5990 Rehabilitation Careers

Credit: 1

PREREQUISITE: Health Science Education

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

6105 Work Based Learning

Credit: 1 or 2

PREREQUISITE: Jr. or Sr. who has completed 2 credits in focus area and has completed or is enrolled in a third. **DESCRIPTION:** Work-based learning (WBL) is a proactive approach to bridging the gap between high school and high-demand, high-skill careers in Tennessee. Students build on classroom-based instruction to develop employability skills that prepare them for success in postsecondary education and future careers. Through experiences like internships, apprenticeships, and paid work experience, juniors and seniors (16 years or older) may earn high school credit for capstone WBL experiences. Students who fail a class during the fall semester and/or do not have satisfactory attendance and behavior will not be allowed to participate in Work Based Learning.

HOSPITALITY AND TOURISM

FOCUS AREA—Take courses in order listed

Culinary Arts

5979 Culinary Arts I 5980 Culinary Arts II 5981 Culinary Arts III 6105 Work Based Learning

5979 Culinary Arts I

Credit: 1

DESCRIPTION: Culinary Arts 1 prepares students for gainful employment and/or entry into post-secondary education in the food production and service industry. Content provides students the opportunity to acquire marketable skills by examining both the industry and its career opportunities and by developing food preparation and service and interpersonal skills. Laboratory facilities and experiences, which simulate commercial food production and service operations offer school-based learning opportunities. **\$30 lab fee**

5980 Culinary Arts II

Credit: 1

PREREQUISITE: Culinary Arts I

DESCRIPTION: Culinary Arts 2 provides students the opportunity to acquire marketable skills by demonstrating the principles of safety and sanitation, food preparation skills, and teamwork to manage an environment conducive to quality food production and service operations. Lab facilities and experiences, which simulate commercial food production and service operations, offer school-based learning and work-based learning opportunities.

\$30 lab fee

5981 Culinary Arts III

Credit: 1

PREREQUISITE: Culinary Arts II

DESCRIPTION: Culinary Arts 3 serves as a capstone course. It too prepares students for gainful employment and/or entry into post-secondary education in the food production and service industry. Content provides the opportunity to apply the marketable culinary arts skills they have acquired by assuming increasingly responsible positions including participation in a cooperative education experience. **\$30 lab fee**

6105 Work Based Learning

Credit: 1 or 2

PREREQUISITE: Jr. or Sr. who has completed 2 credits in focus area and has completed or is enrolled in a third. **DESCRIPTION:** Work-based learning (WBL) is a proactive approach to bridging the gap between high school and high-demand, high-skill careers in Tennessee. Students build on classroom-based instruction to develop employability skills that prepare them for success in postsecondary education and future careers. Through experiences like internships, apprenticeships, and paid work experience, juniors and seniors (16 years or older) may earn high school credit for capstone WBL experiences. Students who fail a class during the fall semester and/or do not have satisfactory attendance and behavior will not be allowed to participate in Work Based Learning.

HUMAN SERVICES

FOCUS AREA—Take courses in order listed

Human and Social Sciences

6137 Introduction to Human Studies

6013 Lifespan Development

6136 Family Studies

6105 Work Based Learning

6137 Introduction to Human Studies

Credit: 1

DESCRIPTION: Introduction to Human Studies is a foundational course in the Human Services Cluster. This course introduces students to principles of healthy lifestyles and relationships, communication skills, relationship development, technology uses, and career exploration.

6013 Lifespan Development

Credit: 1

PREREQUISITE: Intro to Human Studies

DESCRIPTION: Lifespan Development builds basic knowledge in human growth, behavior of children from conception through adolescence, adult development and aging, and death and dying.

6136 Family Studies

Credit: 1

PREREQUISITE: Lifespan Development

DESCRIPTION: Family Studies is an applied knowledge course that examines the diversity and evolving structure of the modern family. Course standards focus on the demographic, historical, social changes of interpersonal relationships, as well as parenting, and the effect of stressors on the family.

6105 Work Based Learning

Credit: 1 or 2

PREREQUISITE: Jr. or Sr. who has completed 2 credits in focus area and has completed or is enrolled in a third. **DESCRIPTION:** Work-based learning (WBL) is a proactive approach to bridging the gap between high school and high-demand, high-skill careers in Tennessee. Students build on classroom-based instruction to develop employability skills that prepare them for success in postsecondary education and future careers. Through experiences like internships, apprenticeships, and paid work experience, juniors and seniors (16 years or older) may earn high school credit for capstone WBL experiences. Students who fail a class during the fall semester and/or do not have satisfactory attendance and behavior will not be allowed to participate in Work Based Learning.

INFORMATION TECHNOLOGY

FOCUS AREA—Take courses in order listed

Networking Systems

6095 Computer Science Foundations

6094 Computer Systems

4114 DE Networking Systems

6105 Work Based Learning

Cybersecurity

6095 Computer Science Foundations

3634 AP Computer Science

6191 DE Cybersecurity

6105 Work Based Learning

6095 Computer Science Foundations

Credit: 1

DESCRIPTION: 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.

6094 Computer Systems

Credit: 1

PREREQUISITE: Computer Science Foundations and Algebra I

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

4114 DE Networking Systems (Dual Enrollment)

Credit: 1 or 2

PREREQUISITE: Computer Systems

DESCRIPTION: Students in this course will begin building hours for the Computer Operating Systems and Network Technology Program at TCAT Pulaski. Students may take this course even if they do not plan to attend TCAT Pulaski. Students that choose to continue in the program upon graduation will be able to apply their earned hours to the Computer Operating Systems and Network Technology Program. The mission of the Computer Operating Systems and Network Technology Program is to provide the information technology industry with CompTIA (Computing Technical Industry Association) certified personnel. Students will be provided the highest quality technical training and job related skills in Computer and Network Servicing. The program is intended to provide the theoretical and mechanical skills needed to perform successfully in specifying, assembling, and installing new systems, diagnosing and correcting system failure, and maintaining and upgrading existing systems.

3634 AP Computer Science

Credit: 1

PREREQUISITE: Algebra 1

DESCRIPTION: This course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. This course can be used as a 4th math.

6191 DE Cybersecurity (Dual Enrollment)

Credit: 2+

PREREQUISITE: Computer Science Foundations

DESCRIPTION: Students in this course will begin building hours for the Information Technology and Infrastructure Management program at TCAT Shelbyville. This program is designed to consist of a combination of job simulated and live projects providing the student with real "hands-on" learning experiences. Students will be provided with a first-hand knowledge of the software, hardware, and operation of computers, network devices, wireless and other advanced technology used in industry today. This may include building, repairing, troubleshooting, installing, networking and servicing computers, network devices, firewalls, mobile devices and other advanced IT/IS devices. The instruction also includes an introduction to information management, cybersecurity, workstations, servers, network infrastructure, and other advanced technology including a thorough education in information technology and information systems. Instruction continues with networking, security, communications, multiple operating systems, and culminates with system and network analysis, diagnosis, and advanced troubleshooting.

6105 Work Based Learning

Credit: 1 or 2

PREREQUISITE: Jr. or Sr. who has completed 2 credits in focus area and has completed or is enrolled in a third. **DESCRIPTION:** Work-based learning (WBL) is a proactive approach to bridging the gap between high school and high-demand, high-skill careers in Tennessee. Students build on classroom-based instruction to develop employability skills that prepare them for success in postsecondary education and future careers. Through experiences like internships, apprenticeships, and paid work experience, juniors and seniors (16 years or older) may earn high school credit for capstone WBL experiences. Students who fail a class during the fall semester and/or do not have satisfactory attendance and behavior will not be allowed to participate in Work Based Learning.

Government and Public Administration

FOCUS AREAS-- Take courses in order listed

Leadership in Goverment

3331 Naval Science (ROTC) 1

3332 Naval Science (ROTC) 2

3333 Naval Science (ROTC) 3

3334 Naval Science (ROTC) 4

3331 Naval Science (ROTC) 1

Credit: 1

PREREQUISITE: None

DESCRIPTION: This course is an introduction to the meaning of citizenship, the elements of leadership, and the value of scholarship in attaining life goals. It promotes an awareness of the importance of a healthy lifestyle, including physical fitness, a proper diet, controlling stress, and drug awareness. The course provides the principles of health and first aid, geography and survival skills, and an overview of Naval ships and aircraft. These elements are pursued at a fundamental level.

3332 Naval Science (ROTC) 2

Credit: 1

PREREQUISITE: Naval Science (ROTC) 1, Grades 10-12

DESCRIPTION: This course builds on the general introduction provided in Naval Science 1 to further develop the traits of citizenship and leadership. It will introduce cadets to the technical areas of naval science and the role of the U.S. Navy in maritime history as well as the vital importance of the world's oceans to the continued well-being of the United States.

3333 Naval Science (ROTC) 3

Credit: 1

PREREQUISITE: Naval Science (ROTC) 1 & 2, Grades 11-12

DESCRIPTION: This course will broaden students' understanding of the operative principles of military leadership, the concept and significance of teamwork, the intrinsic value of good order and discipline in the accomplishment of objectives, and the importance of sea power and national security. Students will gain a more in-depth knowledge of Naval ships and aircraft and will be introduced to marine navigation and seamanship.

3334 Naval Science (ROTC) 4

Credit: 1

PREREQUISITE: Naval Science (ROTC) 1, 2, and 3, Grade 12

DESCRIPTION: This course if focused primarily on practical leadership techniques and implementation. The intent is to assist seniors in understanding leadership and improving these skills by putting them in positions of leadership, under supervision, then helping them analyze the reasons for their varying degrees of success throughout the year. Classroom activities include seminars, reading assignments, classroom presentations, and practical work with younger cadets. Seniors are mentored/guided in their preparation for life after high school to include college preparation, scholarship applications, and the variety of choices that are available to them.

STEM

FOCUS AREA—Take courses in order listed

Engineering

5924 Principles of Engineering and Technology

6139 Engineering I

6140 Engineering II

6105 Work Based Learning

Technology

5924 Principles of Engineering and Technology

5925 Digital Electronics

6143 Robotics and Automated Systems

6105 Work Based Learning

5924 Principles of Engineering

Credit: 1

DESCRIPTION: Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. In Principles of Engineering (POE) Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation.

6139 Engineering I

Credit: 1

PREREQUISITE: Principles of Engineering

DESCRIPTION: 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.

6139 Engineering II

Credit: 1

PREREQUISITE: Engineering I

DESCRIPTION: 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. Note: Students are expected to use engineering notebooks to document procedures, design ideas, and other notes for all projects throughout the course.

5925 Digital Electronics (DE)

Credit: 1

PREREQUISITE: Principles of Engineering

DESCRIPTION: Digital Electronics provides a foundation for students who are interested in electrical engineering, electronics, or circuit design. Students study topics such as combinational and sequential logic and are exposed to circuit design tools used in industry, including logic gates, integrated circuits, and programmable logic devices.

6143 Robotics and Automated Systems

Credit: 1

PREREQUISITE: Digital Electronics

DESCRIPTION: 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. Note: Standards in this course are presented sequentially for students' learning progression; however, instructors may tailor the order of course standards to their specifications. Students are expected to use engineering notebooks to document procedures, design ideas, and other notes for all projects throughout the course.

6105 Work Based Learning

Credit: 1 or 2

PREREQUISITE: Jr. or Sr. who has completed 2 credits in focus area and has completed or is enrolled in a third. **DESCRIPTION:** Work-based learning (WBL) is a proactive approach to bridging the gap between high school and high-demand, high-skill careers in Tennessee. Students build on classroom-based instruction to develop employability skills that prepare them for success in postsecondary education and future careers. Through experiences like internships, apprenticeships, and paid work experience, juniors and seniors (16 years or older) may earn high school credit for capstone WBL experiences. Students who fail a class during the fall semester and/or do not have satisfactory attendance and behavior will not be allowed to participate in Work Based Learning.

TRANSPORTATION, DISTRIBUTION, & LOGISTICS

FOCUS AREA—Take courses in order listed

Automotive Maintenance and Light Repair

5879 Maintenance and Light Repair I

5880 Maintenance and Light Repair II

5881 Maintenance and Light Repair III

5882 Maintenance and Light Repairs IV

6105 Work Based Learning

5879 Maintenance and Light Repair I

Credit: 1

DESCRIPTION: This course (MLR I) prepares students for entry into Maintenance and Light Repair II (MLR II). Students explore career opportunities and requirements of a professional service technician. Content emphasizes beginning transportation services 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.

5880 Maintenance and Light Repair II

Credit: 1

PREREQUISITE: MLR I

DESCRIPTION: The Maintenance and Light Repair II (MLR II) course prepares students for entry into Maintenance and Light Repair 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.

5881 Maintenance and Light Repair III

Credit: 2

PREREQUISITE: MLR II

DESCRIPTION: The Maintenance and Light Repair III (MLR III) course prepares students for entry into Maintenance and Light Repair IV. 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.

5882 Maintenance and Light Repair IV

Credit: 2

PREREQUISITE: MLR III

DESCRIPTION: The Maintenance and Light Repair IV (MLR IV) course prepares students for entry into the automotive workforce or into post-secondary training. Student's study and service automotive HVAC systems, engine performance systems, automatic and manual transmission/transaxle systems, and practice workplace soft skills. Upon completing all of the Maintenance and Light Repair courses, students may enter the automotive service industry as an ASE Certified MLR Technician.

6105 Work Based Learning

Credit: 1 or 2

PREREQUISITE: Jr. or Sr. who has completed 2 credits in focus area and has completed or is enrolled in a third. **DESCRIPTION:** Work-based learning (WBL) is a proactive approach to bridging the gap between high school and high-demand, high-skill careers in Tennessee. Students build on classroom-based instruction to develop employability skills that prepare them for success in postsecondary education and future careers. Through experiences like internships, apprenticeships, and paid work experience, juniors and seniors (16 years or older) may earn high school credit for capstone WBL experiences. Students who fail a class during the fall semester and/or do not have satisfactory attendance and behavior will not be allowed to participate in Work Based Learning.

Academic Clusters

ADVANCED PLACEMENT

Any 3 full year AP courses

FINE ARTS

Any three fine art credits beyond the one fine art credit required for graduation. Four total fine art credits.

HUMANITIES

Any three additional English, Social Studies, and/or Foreign Language credits beyond the required credits for English (4), Social Studies (3), and Foreign Language (2). Twelve total Humanities credits.

MATH & SCIENCE

Three credits of Math and/or Science beyond the Math (4) and/or Science (3) credits that are required for graduation. Ten total math/science credits.

MISCELLANEOUS COURSES

3081 ACT Review

Credit: 1/2

DESCRIPTION: This course is designed to diagnose ACT strengths and weakness areas and provide a plan for meeting goals and improving ACT scores of all students. Emphasis is placed on critical reading, math and reasoning skills as well as test-taking strategies.

3634 AP Computer Science

Credit: 1

PREREQUISITE: Algebra 1

DESCRIPTION: This course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. This course can be used as a 4th math.

3008 Journalism I (Yearbook Staff- Spring Only)

Credit: 1

PREREQUISITE: Teacher approval

DESCRIPTION: This class consists of the student publication of the yearbook.

2902 Journalism II (Yearbook Staff- Spring Only)

Credit: 1

PREREQUISITE: Teacher approval

DESCRIPTION: This class consists of the student publication of the yearbook.

1031 Peer Tutoring

Credit: 1

MAXIMUM CREDIT: 2

PREREQUISITE: Teacher approval

DESCRIPTION: Peer tutoring is an opportunity for students to work with, plan for, and have an understanding of individuals with special needs.

3500 Capstone

Credit: 1 or 2

DESCRIPTION: Capstone is only offered to seniors who meet all graduation requirements, including 26 total credits, and satisfactory attendance and behavior.

PROJECT BASED

MOTLOW DUAL ENROLLMENT

Motlow courses are available to LCHS students during the school day. It is recommended that students take a total of 2 courses during the school day their junior year and 4 courses during the school day their senior year. Any courses exceeding that number should be taken during the evening/summer.

With Motlow State Community College's 4-Pack, the first 4 (three credit hour) classes are tuition-free as long as you **qualify and receive** the dual enrollment grant with these funds going to Motlow State Community College. After the 4th class, students can borrow from the HOPE scholarship if they qualify. **Please be advised these costs are subject to change.**

**Because of the anticipated high demand for specific classes, students will be accepted into classes based on their application date and the date of receipt of the completed enrollment materials.

Dual Enrollment Student Tuition Based on a 3-credit hour class

	1st Class	2nd Class	3rd Class	4th Class	5th Class	6th Class	7th Class	8th Class
	Classes 1-4 may be taken beginning student's junior year. Grant money received for classes 1-4 does not affect a student's HOPE scholarship.				Grant money for classes 5-8 will be borrowed from HOPE scholarship on dollar-per-dollar basis.			
Motlow tuition and fees	\$498	\$498	\$498	\$498	\$498	\$498	\$498	\$498
Dual Enrollment Grant		(\$498)	(\$200)	(\$0)	(\$300)	(\$300)	(\$300)	(\$300)
Total tuition cost to student WITHOUT MSCC 4-Pack		0	\$298	\$498	\$198	\$198	\$198	\$198
Total tuition cost to student WITH MSCC 4-Pack		free	free	free	\$198	\$198	\$198	\$198

NOTE: Mechatronics and some math and science courses are four credits.

Textbook costs are NOT covered by the Dual Enrollment Grant. Textbook prices are subject to change without notice. On average, students should plan to spend approximately \$100.00 to \$200.00 on textbooks for each dual enrollment course.

A maximum of two grants can be used in one semester. The 4th grant does count as a grant used. **Students are responsible for any fees not covered by the grant or 4-Pack.**

Enrollment Requirements

- An agreement must exist between Motlow State and the student's high school to offer college-level courses for which both high school and college credits are simultaneously awarded.
- Student must choose courses through consultation with his/her high school counselor and a Motlow advisor to ensure the classes taken do not overlap or conflict with the student's overall high school program.
- Student must have completed the 10th grade.
- Student must have parent/guardian approval.
- Student must have approval of high school principal/guidance counselor.
- Student must have an overall GPA of 3.0 or higher (2.5 if taking CTE courses).
- Student must provide an official high school transcript with the required Grade Point Average (GPA) and/or American College Test (ACT) scores as outlined below. Students who wish to enroll in:
 - A non-core course (For example, Psychology, Speech, Sociology, Music) must meet the standards set below:
 - Score of 21 on ACT; or
 - 3.0 unweighted GPA in all of the student's high school English courses
 - A collegiate mathematics or science course (non-Calculus track) or courses for which a mathematics course serves as a prerequisite course must have
 - a Reading sub-score of 19 or greater, an English sub-score of 18 or greater, and a Math sub-score of 19 or greater; and

- 3.5 unweighted high school GPA in any of the following courses a student has completed:
 Algebra I, Algebra II, Geometry, and Pre-Calculus (a minimum of three of these courses must be completed for GPA calculation)
- Any other core courses (For example, English and History) must meet the standards set below:
 - Reading sub-score of 19 or greater and an English sub-score of 18 or greater; and
 - 3.5 unweighted high school GPA in all English and History courses

Suggested Courses

4022DE Fundamentals of Speech

SPCH 1010

Credit: 1

DESCRIPTION: This course is a study of communication skills, including practice in organizing, preparing, and delivering various types of informative and persuasive speeches, and in engaging in constructive criticism of oral communication.

4027DE Introduction to Sociology

SOCI 1010

Credit: 1

DESCRIPTION: This course identifies basic human relationships essential to survival in modern society and seeks to assist students in understanding and applying this knowledge in everyday life. Topics include introduction to sociology, culture, inequality and social class, political and economic orders, and the changing society.

4021DE Music Appreciation

MUSA 1030

Credit: 1

DESCRIPTION: This course is designed to develop the student's awareness of music from many historical style periods, music from diverse cultures, and the foundations of modern streams of musical thought.

4029DE General Psychology

PSYC 1030

Credit: 1

DESCRIPTION: This is an introductory survey course focused on the scientific study of behavior and mental processes. Topics include the history of psychology, critical thinking and research methods in psychology, the biological and psychological bases of consciousness, sensation, perception, memory, learning, cognition, development across the lifespan, motivation, emotion, sexuality, stress and health, social psychology, personality, psychological disorders, and psychological therapies.

Other courses are available, but must be approved through the guidance office. For core course offerings, see the Motlow Course Catalog.

DUAL ENROLLMENT ADMISSIONS

Check the <u>Motlow dual enrollment website</u> for complete admission requirements. For core course substitutions, check with your guidance counselor for minimum GPA and ACT requirements.

STUDENTS ARE RESPONSIBLE FOR REGISTRATION AND ENROLLMENT AT MOTLOW. THIS IS SEPARATE FROM LCHS REGISTRATION. FOR ASSISTANCE, PLEASE SEE YOUR COUNSELOR.

LCHS GUIDANCE

931-438-1491

Mrs. Byrd Class of 2024 Counselor
Mrs. Harrison Class of 2023 Counselor
Mrs. Howell Class of 2022 Counselor
Mrs. Nobles Class of 2021 Counselor