

# DROBRAM OF STUDIES

2024-2025







### **EMMAUS HIGH SCHOOL**

500 Macungie Avenue Emmaus, PA 18049

Main Office: (610) 965-1650

Visit our website: <a href="https://www.eastpennsd.org/ehs/">https://www.eastpennsd.org/ehs/</a>





Emmaus High School is proud to provide a variety of academic opportunities for students. It is our mission to foster a community in which students become effective problem solvers, collaborators, critical thinkers, and communicators. Everyday, we strive to empower students to grow into confident, adaptable, compassionate individuals to become lifelong learners and contributors to a global society. Our School Profile highlights all the great things we provide at EHS. To view our current school profile, please visit: <a href="https://www.eastpennsd.org/ehs/wp-content/uploads/sites/2/2023/10/EHS-PROFILE.pdf">https://www.eastpennsd.org/ehs/wp-content/uploads/sites/2/2023/10/EHS-PROFILE.pdf</a>.

# **ADMINISTRATION**





### **EMMAUS HIGH SCHOOL**

500 Macungie Avenue Emmaus, PA 18049 Main Office: (610) 965-1650

### HIGH SCHOOL ADMINISTRATION

Mrs. Beth Guarriello, EHS Principal
Ms. Lorie Gamble, Principal for Academic Affairs
Ms. Tabitha Rodriguez, Student Service Principal
Ms. Nicole D'Emilio, Student Service Principal

Mr. Jordan Fortier, Student Service Principal
Mr. Marc Zimmerman, Student Service Principal
Ms. Rebecca George, Athletics Director
Mrs. Carrie Okken. Student Activities Director

For information regarding 1) civil rights, 2) grievance procedures, 3) services, activities and facilities that are accessible to and usable by handicapped persons, or 4) employee or participant complaints of harassment or discrimination, contact Director of Human Resources (Compliance Officer), 800 Pine Street, Emmaus, PA 18049. The Federal Drug-Free Workplace Act requires that your workplace be free of the illegal use of drugs and requires that we issue the following statement to you. No one is allowed to use, make, sell, distribute, or have in their possession any illegal drugs. Any violation of the act will lead to severe disciplinary action which will normally include dismissal.



# PORTRAIT OF A GRADUATE [ATTRIBUTES]

INCLUSIVE	SELF-AWARE	CONFIDENT
ADAPTABLE	REFLECTIVE	CARING & COMPASSIONATE
PERSISTENT	INTROSPECTIVE	CURIOUS
GLOBALLY AWARE	RESILIENT	PHYSICALLY & MENTALLY HEALTHY

# PORTRAIT OF A GRADUATE [SKILLS]







COLLABORATORS



CALCULATED RISK TAKERS



INNOVATIVE CREATORS



PROBLEM SOLVERS



CRITICAL THINKERS



**EFFECTIVE COMMUNICATOR** 



CONSCIENTIOUS RESEARCHERS







FLEXIBLE & CREATIVE THINKERS



SELF-DIRECTED LEARNERS



ENGAGED CITIZEN



# A MESSAGE FROM THE PRINCIPAL

Dear Students, Parents, and Guardians,

As we prepare for the upcoming academic year, we would like to share with you the program of studies that we have carefully designed to provide our students with a well-rounded and enriching educational experience.

At Emmaus High School, our primary goal is to foster a love for learning while equipping our students with the knowledge, skills, and values they need to succeed in an ever-changing world. We encourage you to review our Profile of a Graduate where critical skills and attributes are outlined. We focus on embedding these skills and attributes into our school on a daily basis. We believe that a strong educational foundation is the key to unlocking a world of opportunities.

Our program of studies encompasses a diverse range of subjects and activities, aiming to cater to the individual needs and interests of our students. Some of the highlights of our program include:

- Core Subjects: Our curriculum includes a robust set of core subjects such as Mathematics, Science, English Language Arts, and Social Studies. These subjects form the backbone of our academic program and are designed to promote critical thinking and problem-solving skills.
- Elective Courses: We offer a variety of elective courses in areas such as the world languages, arts, music, physical
  education, and technology. These courses allow students to explore their passions and develop a well-rounded skill set.
- Advanced Placement (AP) and Honors Courses: For students looking to challenge themselves academically, we offer AP
  and Honors courses in select subjects. These courses provide an opportunity for students to earn college credit and engage
  in rigorous academic work.
- **Special Programs:** We offer special programs for students with unique learning needs, including gifted and talented programs, English as a Second Language (EL) support, and special education services.
- Counseling and Support Services: Our dedicated counseling and support staff are available to assist students in their
  academic and personal growth. We are committed to providing a safe and nurturing environment where every student can
  thrive.

This program of studies has been developed with the utmost care and consideration for the individual needs of our students. When selecting courses for next school year, please keep the following in mind:

- It is required that all students take a minimum of five full credits(or the equivalent) courses, in addition to wellness/fitness education. Many students elect to take six or more full-year courses in order to balance their educational experience.
- Student course selections will be final as of the end of June 30th.

We are dedicated to providing a high-quality education that prepares our students for a bright future.

Beyond academics, we encourage students to participate in extracurricular activities such as sports, clubs, and community service. These activities help students develop leadership skills, teamwork, and a sense of community.

We encourage you to review this program with your child and take advantage of the resources and opportunities available at Emmaus High School. We look forward to working together to make the upcoming academic year a successful and fulfilling one.

We believe that a strong partnership between parents and teachers is essential for a student's success. We encourage open communication to ensure that each student receives the support they need. If you have any questions or need further information, please do not hesitate to contact our school. We are here to support you and your child on their educational journey.

Thank you for entrusting us with the education of your child. Together, we will work to make this academic year a memorable and enriching experience.

Sincerely, Mrs. Beth Guarriello Principal, Emmaus High School

# BOARD OF SCHOOL DIRECTORS



Dr. Joshua A. Levinson,

President

Adam Smith,

Vice President

Alisa Bowman

Michael Felegy

Shonta Ford

Jeffrey Jankowski

Timothy Kelly

Gabrielle Klotz

Dr. William Whitney

Ms. Janine L. Allen, Board Secretary

Mr. Robert E. Saul,

Treasurer

Dr. Kristen Campbell,

Superintendent of Schools

Mr. Marc S. Fisher, Esq.,

Solicitor Worth, Magee & Fisher, P.C.

The East Penn School District is an equal opportunity education institution and will not discriminate in its educational programs, activities or employment practices on the basis of race, color, national origin, sex, age, religion, ancestry, disability, union membership or other legally protected classification. Announcement of this policy is in accordance with state and federal laws, including Title VI, Title IX, Section 504 and ADA.



# COUNSELING SERVICES

School counseling services are intended to help students as they navigate high school and prepare to transition to their postsecondary plans. Students are to discuss concerns about academic course work, career planning or social/emotional issues that may arise with their school counselor.

More specifically, the role of the school counselor is to:

- guide students in finding solutions to individual problems
- help students transition and adjust to their surroundings
- aid students in identifying building and community supports
- provide resources for exploring post high school plans and career options
- raise awareness of career and technical opportunities
- assist with academic course planning to meet graduation requirements
- support students through the admission process for post-secondary institutions, technical schools, military enlistment and/or entering the workforce.

Through a comprehensive school counseling program, school counselors support student success by aiming to help students achieve optimal personal growth, acquire positive social skills, set informed career goals and realize their full academic potential so that they may become productive, contributing members of the global community.

### CONTACT YOUR SCHOOL COUNSELOR

Mrs. Kristen Grim, Department Chair	610-965-1663
Ms. Laura Baranek	610-965-1666
Mrs. Sara Burk	610-965-1664
Mrs. Colleen Demchak	610-965-1689
Mrs. Heather Greene	610-965-1665
Mrs. Jessica LaBar	610-965-1691
Ms. Anne Bleiler	610-965-1527
Mrs. Heather Spotts	610-965-1667
Mr. Paul Wood	610-965-1687

### **DEPARTMENT CHAIRS**

Ms. Tracy Maley

, ,	
Mr. John Dietrick	Business and Computer Applications
Ms. Justine Frantzen	English
Ms. Ann Breidenbach	English Learner (EL)
Ms. Heather Day	Family and Consumer Sciences
Ms. Kim Adams	Mathematics/Computer Science
Ms. Megan Tucker	Music
Dr. Nicole Wack	Science
Mr. Brett Snellman	Special Education
Ms. Melissa Moxley	Social Studies
Mr. Steve Braglio	Technology Education
Ms. Lori Miller	Well/Fit/Driver Education/Health
Ms. Deborah Kalb	World Language

Department Chairs can be reached through the Emmaus High School Main Office at 610-965-1650.

# TABLE OF CONTENTS



02	- <u>Course selection: a message to parent</u>	11	- <u>Specialized programs and offerings</u>	36	- ENGLISH LEARNERS (EL)
03	-GRADUATION REQUIREMENTS	14	-THE JASPER LEARNING INITIATIVE	37	- FAMILY & CONSUMER SCIENCES DEPARTMENT
04	- <u>ACT 158</u>	15	- <u>Standardized testing</u>	38	-GIFTED SUPPORT PROGRAM
05	- <u>KEYSTONE EXAMS</u>	16	-CAREER READINESS	39	- <u>MATHEMATICS DEPARTMENT</u>
06	- <u>Prerequisites and override requests</u>	17	- <u>Special education services and programs</u>	43	-MUSIC DEPARTMENT
	- <u>SEMESTERS, FULL TERMS</u>		- <u>CO-TAUGHT COURSES</u>	45	- SCIENCE DEPARTMENT
	-CLASS TRANSFERS AND WITHDRAWALS	18	-CONSULTATIVE/PUSH-IN SERVICES		
08	-GRADE POINT AVERAGE (GPA)	17	- COURSE DESCRIPTIONS	51	- <u>Social Studies department</u>
		17	OUTROE DECORAT FIGHT	<b>56</b>	-SPECIAL EDUCATION DEPARTMENT
09	- CLASS RANK	20	- <u>art department</u>	<b>57</b>	-TECHNOLOGY EDUCATION DEPARTMENT
	- HONORS AND ADVANCED PLACEMENT SEQUENCE	23	-BUSINESS AND COMPUTER APPLICATIONS	31	TEUTINOLOGY EDOCATION DELAKTMENT
	- PASS/FAIL OPTION			60	- PROJECT LEAD THE WAY (PLTW)
	- <u>Exempting courses by exam</u>	26	- <u>Computer science department</u>	63	-WELLNESS/FITNESS DEPARTMENT
10	- EXEMPTING COURSES BY TUTORING	28	- DRIVER EDUCATION DEPARTMENT	66	-WORLD LANGUAGE DEPARTMENT
	-GIFTED SUPPORT PROGRAM			00	WORLD LANGUAGE DET ARTIMENT
	- <u>NCAA ELIGIBILITY</u>	29	- <u>English department</u>	<b>71</b>	-LEHIGH CAREER & TECHNICAL INSTITUTE

PROGRAM OF STUDIES

1



# COURSE SELECTION: A MESSAGE TO PARENTS

Each eighth, ninth, tenth and eleventh grade student will have access to the Program of Studies (POS) via the EHS website. Paper copies will be made available upon request. The POS is the result of meetings with teachers, school counselors, department chairpersons, administrators, parents/guardians, the Superintendent and the Board of School Directors. The Program of Studies describes each course offered in the high school. Please take some time to become familiar with our course offerings. Course selection is regarded as an important function and should be given very serious consideration by students and parents. In February, students will discuss next year's course selections with their subject teachers. All teachers will use the knowledge they have gained having your student in class to assist them in choosing an appropriate course for next year which best suits their abilities and aspirations. Students will then have the opportunity to discuss their teachers' recommendations with their families prior to course registration.

Occasionally, a teacher's recommendation will not match your or your student's selection. You are encouraged to contact the teacher(s) if you have questions regarding your student's course recommendations for that subject area or your student's school counselor for general questions regarding course registration. Please note that students must register for a minimum of 5.25 credits each year and fulfill the high school's graduation requirements by the end of their senior year.

Students are encouraged to select courses with the following objectives in mind:

- 1. Complete all graduation requirements.
- 2. Select courses which will prepare the student for entrance into post-secondary education, the military, technical schools or the workforce. College bound students should familiarize themselves with admission requirements for individual colleges and choose courses accordingly.
- 3. Select courses that are taught at the highest academic level possible for student success.

**Please Note:** Selecting courses should involve careful consideration by the student and their family and should be made on the basis of student interests, abilities, and vocational goals. It is advisable to work closely with the school counselors in the selection of a program of studies. It is strongly recommended that a student planning to take the second year of a continuing type course follow recommended prerequisites.

Course requests will be entered in February. Students, teachers, and families will have the opportunity to verify course requests as part of the scheduling process. Once verifications are completed, all the course requests are tallied. The number of sections of a particular course and teachers' assignments are determined by the students' course requests. All course selection changes must be made before the end of **June 30th.** A course may not be offered because an insufficient number of students selected the course, a certified teacher is not available, or budgetary funds are not available. Although every effort is made to accommodate students' requests, some cannot be honored. Because of the implications a few changes can have on the entire schedule, it is very important that each student's selections be made very carefully.

# GRADUATION REQUIREMENTS





The East Penn School District requires that all students complete a minimum of twenty-one (21) credits as defined in the Program of Studies between grades 9 and 12 to graduate.

Credits must be completed in the following areas:

# OF CREDITS	SUBJECT AREA		
4	English		
4	Social Studies		
3	Science		
3	Mathematics		
2	Arts/Humanities		
1	Wellness/Fitness		
.50	Health		
.25	Driver Education		
.50	Family and Consumer Science		
.50	STEM*		
2.25	Elective Credits		

\*Elective courses that fulfill this requirement will be denoted in the course description. In addition, any science or mathematics course taken beyond the above listed requirements may also be used for this purpose.

All students are required to complete four credits of Social Studies. As students select courses to fulfill the four credit requirement, they must complete all of the following:

- **1.** American Studies (American Studies 1 and 2 OR U.S History, Advanced Placement)
- 2. World Studies (World Studies; European History, Advanced Placement; or World History, Advanced Placement)
- **3.** Government (Government/Economics, GP; Government, CP; U.S. Government, Advanced Placement; U.S. History, Advanced Placement; or Humanities)

Students must pass three full credits of science, at least one of which must be Biology.



# GRADUATION REQUIREMENTS (CONT'D.)

Arts/Humanities: Any course offered in the following departments may be used to satisfy the Arts/Humanities requirements:

Art	Music	English	Family Consumer Science	Social Studies	World Language	Technology Education
-----	-------	---------	-------------------------------	----------------	-------------------	-------------------------

Students must successfully complete four (4) Wellness/Fitness courses (one each year). One of these must be Aquatics.

Students transferring into the East Penn School District who are in jeopardy of not satisfying local graduation requirements due to differences in requirements between the East Penn School District and the previous school(s) attended and/or students enrolled in approved differentiated academic programs are entitled to an adjustment in the graduation requirements according to procedures established by the Superintendent/Principal.



In accordance with Act 158 of 2018, students must meet statewide graduation requirements in one of five ways.

### Options 1 and 2 - Keystone Pathways:

- Option 1 Keystone Proficiency Pathway: Scoring proficient or advanced on each Keystone Exam Algebra 1, Literature, and Biology.
- Option 2 Keystone Composite Pathway: Earning a composite score of 4452 on the three Keystone Exams, while achieving at least a proficient score on at least one of the three exams and no less than a basic score on the remaining two.

### Option 3 - Alternate Assessment Pathway:

Successful completion of locally established grade-based requirements for academic content areas associated with each Keystone Exam on which the student did not achieve proficiency and one of the following:

- Attainment of an established score on an approved alternate assessment:
  - SAT score of 1010
  - PSAT score of 970
  - ACT score of 21
  - Armed Services Vocational Aptitude Battery Exam (ASVAB): minimum score (31)to gain admittance to a branch of the armed services in the year the student graduates
- Attainment of an established score on an Advanced Placement (AP) Program in an academic content area associated with each Keystone exam in which the student did not achieve at least a proficient score
- Successful completion of a dual enrollment course in an academic content area associated with each Keystone exam in which
  the student did not achieve at least a proficient score
- Successful completion of a pre-apprenticeship program; or

# ACT 158 (CONT'D.)



 Acceptance to an accredited 4-year nonprofit institution of higher education and evidence of the ability to enroll in collegelevel coursework

### Option 4 - Evidence-Based Pathway:

Successful completion of locally established grade-based requirements for academic content areas associated with each Keystone Exam on which the student did not achieve proficiency and demonstration of three pieces of evidence consistent with the student's goals and career plans, including one of the following:

- Attainment of an established score on an SAT subject test or an Advanced Placement Program Exam
- Acceptance to an accredited 4-year nonprofit institution of higher education and evidence of the ability to enroll in collegelevel coursework
- Attainment of an industry-recognized credential through LCTI
- Successful completion of a concurrent enrollment or postsecondary course; and Two additional pieces of evidence, including:
- One or more of the options listed above
- Satisfactory completion of a service learning project; attainment of a score of proficient or advanced on a Keystone Exam; a letter guaranteeing full-time employment; a certificate of successful completion of an internship or cooperative education program; or satisfactory compliance with the NCAA's core courses for college-bound student athletes with a minimum grade point average (GPA) of 2.0

### **Option 5 - CTE Pathway:**

For Career and Technical Education (CTE) Concentrators, successful completion of locally established grade-based requirements for academic content areas associated with each Keystone Exam on which the student did not achieve proficiency and attainment of an industry-based competency certification related to the CTE Concentrator's program of study or demonstration of a high likelihood of success on an approved industry-based competency assessment or readiness for continued meaningful engagement in the CTE Concentrator's program of study.

The statewide graduation requirement is outlined in Act 6 and Act 158.

# **KEYSTONE EXAMS**

The Keystone Exams are end-of-course assessments designed to assess proficiency. Keystone exams are administered in the subject areas of Algebra 1, Literature, and Biology. The Keystone Exams are one component of Pennsylvania's system of high school graduation requirements.

Keystone Exams help school districts guide students toward meeting state standards-aligned with expectations for success in college and the workplace. In order to receive a diploma, students must also meet local district graduation requirements. Detailed information about the Keystone Exams can be found at:



# PREREQUISITES AND OVERRIDE REQUESTS

Students and families are expected to review and consider prerequisites before registering for any course. Students who have not satisfied the prerequisite and/or who are not recommended by their current teacher to take the desired course should first discuss the recommendation with their teacher. If the prerequisite has not been met, students should see their school counselor for more information or to request the Prerequisite Override Request Form after March 30th. The request will be reviewed and approved or denied by a committee based on the information presented.



# SEMESTERS, FULL TERMS

During the 2024-2025 school year, Emmaus High School will operate on an A/B block schedule. In an A/B block schedule, students attend a maximum of four classes per day, which are longer in duration than on a traditional schedule. Students attend half of their classes each day, on an A/B rotation. One credit courses run for a full year. Half credit courses run for one semester (two marking periods). Quarter credit classes run for one marking period. Courses that receive more than 1.0 credit may meet both A & B cycle days.



# CLASS TRANSFERS AND WITHDRAWALS

Students requesting a class transfer and/or withdrawal from a course must meet specific criteria and follow the process for requesting a course change. Once the posted deadline for schedule changes has passed, transfers and/or withdrawals from scheduled classes will only be considered in very unusual situations. The process for requesting a change is as follows:

- 1. Family and/or student contacts school counselor to request a change.
- 2. If the presented reason qualifies as a special circumstance, school counselor provides the form to the family, student, and teacher to complete. All three parties must complete the form.
- **3.** The committee comprised of school counselors and administrator(s) reviews the request. The outcome is determined by the committee after analyzing the student's record and the information provided in the aforementioned form.

A withdrawal that does not result in a transfer to another course in the same academic content area will receive a W as the final grade on a student's transcript after a marking period grade has been issued.

The deadline for a student to request a course change is **September 30th** for year long and first semester courses. For courses scheduled during the second semester only, the deadline for such a request is **February 28th**.

# **COURSE WITHDRAWAL CRITERIA**

Once schedules are developed (in May the year prior), a student can make any changes until the end of June (prior to the school year starting). Once a class has started in August, transfers and/or withdrawals from scheduled classes are only considered in "Special Circumstances." A change request is highly unlikely to be implemented after **June 30th** due to the explicit and complex nature of our master schedule of which is solely built using student course requests from our entire student body. We cannot stress enough the importance of the course selection process during our Course Registration time frame for this reason. With that said, we still review

# CLASS TRANSFERS AND WITHDRAWALS (CONT'D)



cases if they meet the Special Circumstance criteria.

If a student wants to add/drop a class after **June 30th**, the student must speak with their school counselor to determine if the request meets the criteria. In order for the change request to be considered, the reason for wanting the change must fall in one of six predetermined categories.

### **Special Circumstance criteria:**

- **1.** A student wishes to challenge themself by adding an additional course to their schedule.
- **2.** The student wishes to challenge themself by moving up to a more rigorous course level.
- 3. The student requested to take a course that is beyond their ability and wishes to drop the course. Student historical & current data would need to support this request.
- 4. The student requested to take a course that was beyond their ability and wishes to move to a less rigorous course level of the same content area. Student historical & current data would need to support this request.
- **5.** The student wishes to drop a course or change a course level for medical reasons. \*\*Medical documentation is required for this request\*\*
- **6.** The student has greater than 7.0 credits in their schedule for the year.

If the school counselor assesses the request and determines the student meets one or more of these criteria, a student may proceed through the process of add/drop where a committee reviews the required submissions and the student's historical data. Once the data is reviewed, the committee makes a determination if the request meets the criteria for a change/approval.

**Please note**- A student must sit through and experience a class prior to seeking to drop a course with their school counselor if a request is made after **June 30th**.



# GRADE POINT AVERAGE (GPA)



The Grade Point Average (GPA) is a system for calculating a student's scholastic average on a 0 to 4+ scale.

Wellness/Fitness courses, courses taken at a college/university, courses taken as pass/fail, and courses that are taken as an independent study are not used in calculating the GPA.

The GPA calculation is based on final grades earned in each course. Final grades are awarded based on quarter and semester exam grades. GPA is calculated and reported once annually, and additionally, at the end of a student's seventh semester. These calculations are performed in the following manner:

A mark is assigned a numerical value called the Quality Point (QP). The Quality Point values for course marks are:

GRADE	АР	HONORS/DUAL CREDIT	OTHERS
90 - 100	5 QP	4.5 QP	4 QP
80 - 89	4 QP	3.5 QP	3 QP
70 - 79	3 QP	2.5 QP	2 QP
60 - 69	2 QP	1.5 QP	1QP
0 - 59	0 QP	0.0 QP	0 QP

I, W, P and F are not used in calculating GPA

- Each course has an assigned credit value. A course's credit value is based on the number of meeting times per cycle and the length of the course
- The course value for each quarter is multiplied times the Quality Point Value of the grade earned
- The GPA is determined by dividing the total Quality Points for all courses by the total attempted course credits attempted for all courses. Note: This calculation is reported once annually and additionally, at the end of a student's seventh semester
- Please note: Beginning with the 23-24 school year, all Dual Credit courses listed in the program of studies will carry an honors weight when calculating GPA. Dual Credit and Credit by Exam courses are listed on the back cover of the Program of Studies.

The official cumulative GPA is reported at the end of the academic year. This sum will be divided by the total attempted credits to calculate the cumulative GPA.

A cumulative GPA, which includes all completed coursework through the end of a student's seventh semester, will be calculated and provided to post-secondary institutions that require a mid-year report from applicants upon student request.

# **CLASS RANK**



The School Board authorizes a system of class rank, by grade point average reported as percentiles, for students in grades 9-12. All students shall be ranked together. Class rank shall be computed by the final grade in all subjects for which credit is awarded. It will not be printed on student report cards, transcripts or other documents. A student's class rank can only be provided directly to a college, university, or other appropriate institution or agency, when required. Class rank is not made available to students or their families.

# HONORS AND ADVANCED PLACEMENT SEQUENCE

Honors and Advanced Placement courses are intended for students who are interested in an enriched experience in a specific subject. Enrollment is open to all students who have satisfied the prerequisites and have the ability and desire to handle the increased academic demands. Students who complete an AP course are encouraged to take the AP examination.

Any costs for courses outside of the regular high school program will be the responsibility of the student and their family.

# PASS/FAIL OPTION

A course may be taken on a Pass/Fail basis if the below conditions are satisfied. All arrangements for Pass/Fail courses must be completed prior to the midway date in the first grading period of the course.

- 1. Students must take a minimum of 5.00 credits in the academic year
- 2. Students may not take graduation requirements pass/fail. This includes specific subject requirements and total course requirements
- **3.** The request must be approved by the parent/guardian, teacher, school counselor, and principal or student service assistant principal
- **4.** The teacher may recommend withdrawal from the course if the student is not meeting the course responsibilities

# **EXEMPTING COURSES BY EXAM**

The purpose of this exemption, whenever available, shall be to allow a student, in unusual circumstances, to exempt a particular course because of an existing knowledge base. All arrangements must be approved by the principal or his/her designee by the determined deadline. Exempting exams will be offered during midterm exams, final exams and during the summer. Please reference **School Board Policy 116.1** for more information. Please contact the school counselor if interested.



# **EXEMPTING COURSES BY TUTORING**

The purpose of this exemption shall be to move students ahead of the district- adopted sequence of courses in a particular academic subject through private tutoring. All arrangements must be approved by the principal or his/her designee by the determined deadline. Please reference **School Board Policy 116.1**. Please contact the school counselor if interested.



# GIFTED SUPPORT PROGRAM

Emmaus High School offers programming options for students enrolled in the Gifted Support Program. EHS gifted teachers in the high school develop and implement Gifted Individualized Education Plans (GIEPs). The gifted teachers provide students with enrichment and acceleration when appropriate, and conduct consultations and collaborations for the differentiation of instruction.



# NCAA ELIGIBILITY

All student athletes interested in continuing their athletic careers at the collegiate level (Divisions I and II only, Division III is not affected) must familiarize themselves with NCAA Eligibility rules and requirements, as high school course selection can have an impact on future collegiate academic eligibility.

Student athletes are advised to begin planning early in their high school careers in order to meet NCAA requirements, which are

found in detail here: <a href="www.eligibilitycenter.org">www.eligibilitycenter.org</a>. It is the student athlete's responsibility to be aware of NCAA requirements. Please contact the coach, the EHS Athletic Office, or the school counselor, if you have any questions.



Courses approved by the NCAA are identified with the N.C.A.A. icon

# SPECIALIZED PROGRAMS AND OFFERINGS



Please review these additional options and reach out to the EHS school counselor with any questions.

### LCCC DUAL CREDIT PROGRAM

Lehigh Carbon Community College and Emmaus High School have partnered together to offer Dual Credit courses. This program enables students to take one or more college courses while still in high school during the regular school day. Courses are taught by qualified high school teachers serving as an LCCC adjunct instructor. Faculty teaching Dual Credit courses are required to meet the hiring standards of LCCC's accrediting agency. Taking advantage of this postsecondary experience will not only jump-start a student's college career, but may give them the opportunity to earn transferable college credits while they are still meeting high school graduation requirements.

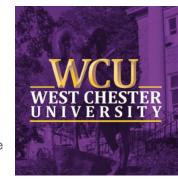


The cost for Dual Credit courses taught in sponsoring high schools by high school faculty is \$30 per credit, or \$90 for a three-credit course, and is the responsibility of the student and their family. There is no application fee for Dual Credit students. Students should consult with their prospective colleges/universities to determine their policy for Dual Credit coursework.

# **CREDIT BY EXAM WITH WEST CHESTER UNIVERSITY**

(Grades 11-12) The Credit-by-Exam opportunity applies to Advanced Astronomy, Astronomy, Geology of National Parks, Meteorology, and Oceanography. Students in 11th or 12th grade with a GPA of 2.8 or higher can become non-degree students at West Chester University. Courses are taught by EHS teachers during the regular school day.

This program is a Dual Credit program. The final grade for West Chester University will be based upon a final exam aligned to EHS approved course curriculum, but also matches the rigor of an entry level college course/exam. The grade submitted to West Chester University may be different from the final course grade at Emmaus High School. Students can apply as non-degree students and complete an application form as part of the agreement. The cost in 2024-2025 is anticipated to be \$92 (cost covers enrollment and 3 college level credits), and is the responsibility of the student and their family.



### **COLLEGE COURSES**

A number of local colleges and universities provide affordable opportunities for Emmaus High School students to take courses on the college's campus while still in high school. Students interested in such an opportunity should contact their school counselor. Prior written approval of the high school principal is required for all college courses 6 weeks in advance of the beginning of the college semester. Approved college courses will receive letter grades and credit which will be reflected on the transcript where appropriate but will not be counted as part of the GPA.

Any costs for courses outside of the regular high school program will be the responsibility of the student and their family.





# SPECIALIZED PROGRAMS AND OFFERINGS (CONT'D.)

### **INDEPENDENT STUDY**

Independent study programs are available in unusual situations when it is determined that a course is a necessary component of a student's program, but it cannot be scheduled. The course must be in the Program of Studies and offered during the academic school year. Courses taken in this manner will receive a grade and assigned course value, but the grade will not be included in GPA calculations. Independent Study arrangements must be approved by the teacher, parent/guardian, school counselor, and principal in writing, and the agreement must be completed prior to midway date in the first grading period of the course. Please reference school board policies 116.1 and 118 for additional information regarding Independent Study.

### FIELD STUDY PROGRAM

(Grades 11-12) The purpose of the Field Study Program is to provide a practical introduction to the professional work environment through direct contact with professionals in the community. Students will participate in a workplace experience, in scheduled meetings with the Field Study Program Teacher/Coordinator, and in semester presentations. Field Studies can be tailored to the unique needs and interests of the learner. External and internal (within East Penn School District) Field Studies are available. Examples include:

External - engineering/architecture Field Study with an architecture firm

**Internal** - serving as a Student Intern Teacher with one of our high school teachers or going to an elementary school at the end of the day

### Credits and Scheduling

Field Studies provide valuable learning through real-world experience in professional settings and successful completion of this learning experience will result in earned academic credit. Course credit is determined by the number of hours that a student works at the Field Study site throughout the school year.

For more detailed information and/or to apply for this program, please see the **EHS Field Study website**.

### **LEHIGH CAREER AND TECHNICAL INSTITUTE (LCTI)**



Lehigh Career and Technical Institute (LCTI) is an extension of the home school. The various programs offered are an integral part of the curriculum of the home high school. Students enrolled in the LCTI half-day program take their required courses at the home school during one-half of the school day and attend LCTI the other half-day for their specialized career program. Students earn credit for the successful completion of each year of vocational training. All LCTI programs require an application.

An alternative to the half-day program, LCTI's Academic Center provides ninth through twelfth grade students the opportunity to attend LCTI for a full day. This program allows students to take both academic and technical classes at LCTI. The Academic Center also affords students the opportunity to take advanced coursework at Lehigh Carbon Community College in dual credit. Ask your school counselor for more information.



# SPECIALIZED PROGRAMS AND OFFERINGS (CONT'D.)



Diplomas awarded at graduation are given only by the home high school and not LCTI. The Lehigh Career and Technical Institute does, however, present a certificate to each graduating student who has successfully met LCTI standards. Lehigh Career and Technical Institute graduates also receive a listing of competencies completed in their trade area.

Students who wish to enroll in LCTI for their ninth grade year must first meet specific academic eligibility requirements established by the East Penn School District. Students should see their EHS school counselor for more information about these criteria.

### **DIVERSIFIED CAREER OCCUPATIONS (DCO)**



(Grade 11 & 12) The DCO program allows students to split their time between academic courses and part-time work in career fields that interest them, and is available to students during their 11th & 12th grade year. Those students who are in good standing academically and on track for graduation may be released from school early to work. Students are required to meet weekly with a certified, professional school-to-career coordinator from LCTI who helps them develop 21st century skills such as collaboration, critical thinking and problem solving. Weekly competency-based instruction takes place at the high school with the LCTI coordinator and students are formally evaluated by both the LCTI coordinator and their employer each marking period. Students who participate in DCO receive credit towards graduation. Background checks are required for employer mentors who hire minors in the DCO program. This course is available during both semesters with an opportunity to obtain 1.5 credits per semester. For more detailed information and/or to apply for this program, students should see their EHS school counselor.



# THE JASPER LEARNING INITIATIVE



### **JASPER COURSE SEQUENCE**

Interested students must be prepared to take the CP level courses below. To apply and get more information, please visit **www.eastpennsd.org/Jasper**.

### 9TH GRADE COURSES

The learning plan for 9th grade students will consist of 4 college preparatory courses. These courses include:

American Studies 1 CP - J201

9th Grade English CP - J111

Global Science Inquiry - J411

These courses are taught in a project-based manner. Course descriptions can be found in the Program of Studies.

### **Design & Development - J970**

Utilizing a design thinking framework, students will learn the essentials of product design and problem solving. Students will be faced with three design challenges and will use design thinking to make an improvement for our community, create a tangible product based on the needs of others, and solve a community problem of their choice. While progressing through the design process, students will work closely with community needs in mind and will continually hone their organizational, communication and interpersonal skills, their creative and problem-solving abilities, and their understanding of the design process.

### **10TH GRADE COURSES**

The learning plan for 10th grade students will consist of 3 college preparatory courses. These courses include:

American Studies 2 CP - J212

10th Grade English CP - J116

Biology - J417

These courses are taught in a project-based manner. Course descriptions can be found in the Program of Studies.

### 11TH GRADE COURSES

The learning plan for 11th grade students will consist of at least 2 college preparatory courses with Chemistry being an optional course depending on individual interest. These courses include:

World Studies 1 CP - J222

11th Grade English CP - J126

Chemistry (optional) - 421PB

These courses are taught in a project-based manner. Course descriptions can be found in the Program of Studies.

### **12TH GRADE COURSES**

The learning plan for 12th grade students will consist of 2 college preparatory courses. These courses include:

**Government CP - J231** 

12th Grade English CP - J138

These courses are taught in a project-based manner. Course descriptions can be found in the Program of Studies.

### Field Study (optional in 11th and 12th Grade)

Please read the Program descriptions in the Program of Studies for more information about field study opportunities. This is not a requirement for Jasper students in 11th grade, but is recommended.

# STANDARDIZED TESTING





# **PSAT/NMSQT**

The PSAT is recommended for all college-bound juniors who plan on taking the SAT and/or wish to compete for the National Merit Scholarship. PSAT testing occurs in October each year.

### **KEYSTONE EXAMS**

As noted previously within graduation requirements, the Keystone Exams are end-of-course assessments designed to assess proficiency in various subjects.

### SAT

Emmaus High School will also offer the SAT test three times during the first semester of the 2024-2025 school year, as well as the SAT two times during the second semester. Please see <a href="https://collegeboard.org/">https://collegeboard.org/</a> for specific dates and to register for a test. A student with a disability, whose condition substantially limits their ability to participate in College Board tests, may be eligible for accommodations. The request for accommodations is initiated by completing a Student Eligibility Form. This eligibility form has specific deadline dates and can be obtained on the College Board website.

# **ADVANCED PLACEMENT (AP) EXAMS**

Emmaus High School will offer AP exams for College Board approved Advanced Placement courses taught at EHS. AP Exams are standardized exams designed to measure how well a student has mastered the content and skills of a specific AP course. For more information on AP testing, please go to <a href="https://apstudents.collegeboard.org/">https://apstudents.collegeboard.org/</a>. Students may earn college credit for an AP course, depending on their AP exam score. For more information on this aspect of AP testing, please visit specific college websites, as each institution has their own AP credit policy.



# CAREER READINESS





To help ensure that all students in Pennsylvania are on track for meaningful postsecondary engagement and success, the Pennsylvania Department of Education has included a measure of students' career exploration, preparation, and readiness as part of Pennsylvania's state and federal accountability system through the Future Ready PA Index and under the Every Student Succeeds Act (ESSA).

The Career Education and Work Standards are part of the State Board of Education's regulations of required education for all students in Pennsylvania. The Career Education and Work Standards address four areas of knowledge:

- Career Awareness and Preparation
- Career Acquisition (Getting a Job)
- Career Retention and Advancement
- Entrepreneurship

In conjunction with the requirements set forth by the PA Department of Education, Emmaus High School students are required to submit a minimum of eight (8) artifacts, showing they have met Career Readiness standards by April of their junior year. Students receive, track, and submit this information through their respective Schoology grade level classroom. Throughout grades 9-11, EHS students have many opportunities to fulfill this requirement, including, but not limited to: classwork activities, college/career visits, Naviance activities and reflections, and Schoology Classroom activities. If students have any questions regarding the fulfillment of Career Readiness standards, they should contact their school counselor.



# SPECIAL EDUCATION SERVICES AND PROGRAMS



In accordance with both Pennsylvania and federal laws, students who meet the criteria for special education eligibility possess the right to participate in the general education curriculum within a standard educational environment known as the Least Restrictive Environment (LRE). The framework of support and services is outlined in the student's Individualized Education Program (IEP). The fundamental principle of providing a Free and Appropriate Public Education (FAPE) to students with disabilities commences with considering services within the LRE. The organization and delivery of special education services are designed to be adaptable and responsive, ensuring that the student's unique eligibility requirements are met without unnecessarily isolating them from the standard educational setting. Supplementary aids and services provided to each student are contingent upon their specific needs. The East Penn School District actively promotes inclusive opportunities for all its students.

Students are encouraged to participate to the fullest extent possible in the general education curriculum within the standard classroom, with appropriate accommodations, adaptations, or modifications when necessary. The district offers a comprehensive range of services and programs, and eligible students may receive instruction through supplemental curricula. Service/program alternatives may be considered when intensifying the study program becomes necessary to address the student's overall needs.

Transition planning initiates at age 14, with the IEP team determining the courses that will prepare the student for life beyond high school during this process. The transition planning, involving the student and parent, encompasses various aspects such as college or post-high school planning, exploration of employment opportunities, and independent living skills, including recreational and leisure activities. The planning also involves selecting high school courses that align with the student's future goals. Early planning promotes a coordinated approach between the student's current education and their future aspirations. Students are encouraged to prepare for post-high school education, whether it be college or vocational/technical school. Those considering college are advised to take the PSAT and SAT assessments, with or without accommodations. Some students may opt for a vocational curriculum and attend the Lehigh Carbon Technical Institute (LCTI), which offers a diverse range of programs.

All students receiving special education services are assured the opportunity to earn a high school diploma. The IEP Team determines the criteria for awarding a diploma, with eligible students required to successfully complete all mandatory courses and credits, as well as meet performance standards through assessments or via the IEP transition goals.

# CO-TAUGHT COURSES

Co-teaching is an evidence-based approach aimed at aiding students in need of academic support, with a particular focus on helping them meet the heightened literacy requirements necessary for career and college readiness. In co-taught classes, there are two educators collaborating: one holds certification in a content area, such as English or mathematics, while the other is certified in special education.

The primary objective of the EHS co-teaching program is to deliver high-quality instruction to academically at-risk students, those currently not demonstrating proficiency, within a setting that emphasizes both high expectations and robust support. This program is structured to provide standards-based instruction aligned with Pennsylvania graduation requirements, incorporating substantial support measures to ensure compliance. Such support entails a concept-oriented approach, alternative teaching and assessment methods, and increased teacher-student interaction.

In this dynamic environment, students will receive comprehensive support for their core learning needs while simultaneously developing personal skills. Roles and responsibilities within the classroom are clearly defined, and individualized support is precisely targeted to each student. The curriculum adheres to grade-level standards but is adapted as needed, fostering the belief that diligent effort leads to success.

As previously mentioned, co-taught classes feature two educators, each with distinct yet equally vital roles. These educators collaborate not only with each other but also with students to foster academic growth and achievement. Students are held to elevated standards and receive robust support from both instructors.



# CONSULTATIVE/PUSH-IN SERVICES

Consultative support programming at EHS encompasses a holistic approach to fostering academic success and personal growth among students with diverse learning needs. By tailoring individualized strategies, interventions, and resources, this framework aims to empower students to reach their full potential. Through ongoing collaboration between educators, specialists, and families, consultative support programming not only addresses academic challenges but also nurtures social-emotional development, self-advocacy skills, and a sense of belonging, ensuring that every student has equitable access to a supportive educational environment that fosters their unique strengths and helps them overcome obstacles on their educational journey.







# CCURSE DESCRIPTIONS

2024-2025





# ART DEPARTMENT



The Art Department specializes in four types of art:

Drawing and Painting

**Printmaking** 

**Ceramics** 

**Crafts** 

Printmaking, Crafts, Ceramics, and Drawing/Painting. Each has a Level One, Two, and Three course. All Level One classes are half-year (.5 cr) and the Level Two and Three courses are full-year (1.0 cr).

Are you a freshman, or just starting out in the art department? We recommend you pair two classes to get a full year of art!

- 2D Pairing Request both Drawing/Painting 1 and Printmaking 1. These two courses will build your technical drawing, painting, and composition skills.
- 3D Pairing Request both Crafts 1 and Ceramics 1. These two courses will build your technical building and design skills.

Looking for a challenge in 11th or 12th grade? We offer AP Art & Design and AP Art History in our program. Be sure to look at the prerequisites for AP Art & Design if you're interested!

We also offer a Foundation of Art (.5 cr) half-year class. This is for students who have little to no art experience but would like to learn and explore the basics of art.

# FOUNDATIONS OF ART A705C | GRADE 9-12

Credit:

Are you a beginner when it comes to art making? Would you like to learn the fundamentals? In this entry-level art class, students learn to observe, develop a craft, and use art to communicate ideas. Projects will be step-by-step, with some student-choice options.

# CERAMICS 1 A708 | GRADE 9-12

Credit:

Students will recognize their creative potential in clay through the investigation of historical and contemporary ceramics. Ceramics 1 focuses on developing successful studio practices while exploring a wide variety of ceramics forms, building processes, and surface decoration techniques.

# **CERAMICS 2** A718/718D | GRADE 10-12

Credit:

Students will push their creative potential in clay while investigating historical and contemporary ceramics. Ceramics 2 focuses on further applying successful studio practices while exploring major themes in art to guide independent student exploration.

Prerequisite: Recommended 80% or better in Ceramics 1

### A718D

Students may elect to take this course for undergraduate college credits through Lehigh Carbon Community College's Dual Credit Program.

# ART DEPARTMENT (CONT'D.)



# CERAMICS 3 A728 | GRADE 11-12

Credit:

Students will continue to push their creative capacity in clay while investigating historical and contemporary ceramics. Ceramics 3 focuses on mastering successful studio practices and requires students to choose a theme that will guide their projects throughout the year.



Prerequisite: Recommended 80% or better in Ceramics 2

# CRAFTS 1 A709 | GRADE 9-12



Students will recognize their creative potential in various craft mediums (wood and fibers). Crafts Level 1 teaches the elements and principles of art and helps students develop successful art studio practices.

# **CRAFTS 2**A719 | GRADE 10-12



Students recognize their creative potential in various crafts mediums (wood and fibers). Crafts Level 2 students understand the elements and principles of art and begin to intrinsically use these traits in their work. Students learn how to practice the **8 Studio Habits of Mind** from the book Studio Thinking.



Prerequisite: Recommended 80% or better in Crafts 1

# CRAFTS 3 A729 | GRADE 11-12



Students promote their individual creative strengths through crafts (wood and fibers). Crafts Level 3 students will demonstrate a synthesis of their own creative ability, use of elements and principles of design and refine their **8 studio habits of mind skills**.



Prerequisite: Recommended 80% or better in Crafts 2

# DRAWING AND PAINTING 1 A710 | GRADE 9-12



Students will recognize their creative potential in various drawing and painting mediums. Drawing and Painting Level 1 teaches the elements and principles of art and helps students develop successful art studio practices.

### **DRAWING AND PAINTING 2**



### A721 | GRADE 10-12

Students recognize their creative potential in various drawing and painting mediums. Drawing and Painting Level 2 students understand the elements and principles of art and begin to intrinsically use these traits in their work. Students learn how to practice the **8 Studio Habits** of Mind from the book Studio Thinking.



Prerequisite: Recommended 80% or better in Drawing and Painting 1

# DRAWING AND PAINTING 3

Credit:

### A731 | GRADE 11-12

Students promote their individual creative strengths through drawing and painting. Drawing and Painting Level 3 students will demonstrate a synthesis of their own creative ability, use of elements and principles of design and refine their 8 studio habits of mind skills.



Prerequisite: Recommended 80% or better in Drawing and Painting 2

# PRINTMAKING 1

Credit:

### A712 | GRADE 9-12

Students will recognize their creative potential in various printmaking mediums (relief, intaglio, monoprint, and screenprint), while exploring historic and contemporary printmakers. Printmaking Level 1 teaches the elements and principles of art and helps students develop successful art studio practices.

## PRINTMAKING 2 A722 I GRADE 10-12

Credit:

Students recognize their creative potential in various printmaking mediums (relief, intaglio, monoprint, screenprint, risograph, etc.)

Printmaking Level 2 students understand the elements and principles of art and begin to intrinsically use these traits in their work. They'll learn about historic and contemporary printmakers. Students learn how to practice the <u>8 Studio Habits of Mind from the book Studio Thinking</u>.



Prerequisite: Recommended 80% or better in Printmaking 1

## PRINTMAKING 3 A732 | GRADE 11-12



Students promote their individual creative strengths through printmaking mediums (relief, intaglio, monoprint, screenprint, risograph, etc.). They'll learn about historic and contemporary printmakers. Printmaking 3 students will demonstrate a synthesis of their own creative ability, use of elements and principles of design and refine their 8 studio habits of mind skills.



Prerequisite: Recommended 80% or better in Printmaking 2



# ART DEPARTMENT (CONT'D.)

## DIGITAL FINE ART 1 A713 | GRADE 9-12

Credit:

Students will recognize their creative potential in various digital programs. Digital Fine Art 1 teaches the elements and principles of art and helps students develop successful art studio practices.

# DIGITAL FINE ART 2 A723 | GRADE 10-12

Credit:

Students recognize their creative potential in various digital art programs. Digital Fine Art 2 students understand the elements and principles of art and begin to intrinsically use these traits in their work. Students learn how to practice the **8 Studio Habits of Mind from the book Studio Thinking**.

ļ

Prerequisite: Recommended 80% or better in Digital Fine Art 1

### DIGITAL FINE ART 3 A733 | GRADE 11-12



Students promote their individual creative strengths through digital fine art. Digital Fine Art students will demonstrate a synthesis of their own creative ability, use of elements and principles of design and refine their 8 studio habits of mind skills.

Ţ

Prerequisite: Recommended 80% or better in Digital Fine Art 2

# ART HISTORY, ADVANCED PLACEMENT 764 | GRADE 11-12

Credit:

This college-level course will help students gain an understanding and knowledge of architecture, sculpting, painting and other art forms within historical and cultural context (Prehistoric, European, West/Central Asia, Indigenous Americas, Africa, South Pacific, East/South Asia, Global Contemporary).



Prerequisite: Current enrollment in college preparatory Social Studies and college preparatory English courses (recommended 75% or better in both)

# ART AND DESIGN, ADVANCED PLACEMENT 766 | GRADE 11-12



Students develop the skills that artists and designers use, and create a portfolio of work that is assessed to produce their AP score. Students upload images of their work over the course of the year, creating a digital portfolio. In AP Art and Design at EHS students choose a 3-D, 2-D, or Drawing Portfolio. AP Art and Design is an introductory college-level course that has an exam fee due in October. Students refine and apply artistic skills to ideas they investigate individually throughout the school year. course.https://apcentral.collegeboard.org/courses/about-ap-art-and-design



Recommended 80% or better in any level 3 course. Portfolio review and approval required

# BUSINESS AND COMPUTER APPLICATIONS





The department's mission is to prepare students for lifelong learning through the use of 21st century skills in technology, business and economic concepts. The curriculum is designed, delivered, evaluated and updated to prepare students to enter the ever changing global economy and job market. Courses that fulfill the STEM graduation requirement are noted in the course descriptions.

# INTRODUCTION TO BUSINESS 601 | Grade 9-12



This introductory course explores the foundations of business and consumer decision making in the global marketplace. Units of study include conducting business in the global marketplace, understanding economic concepts as they apply to the buying and purchasing of goods and services, business ethics and social responsibility, business organization, and entrepreneurship and small business management. This course will incorporate the use of research projects and the creation of projects using real-world scenarios to assist students in building the relevant business and technology skills they will need to develop to enter the business world.

# STUDY AND CAREER SKILLS 603 | GRADE 9-12



This course is beneficial for the student who is interested in improving his or her study habits and exploring possible career paths. It is self-reflective and asks students to evaluate personal habits and interests. Study skills topics include note-taking, time management and test-taking strategies. Students then transition into career exploration and preparation, including interviewing skills and resume writing.

### ENTREPRENEURSHIP 604/604D | GRADE 10-12



Do you have an idea for a new product or business, or a curiosity about how products are developed? Jump into the world of Entrepreneurship as students engage in a Shark-Tank-like experience. Students begin by coming up with ideas for a new product and delivering an elevator pitch for it. Next, students vote on the best ideas, form teams to develop their strategies according to the 9 Building Block model, design logos and create working prototypes. As the culminating final project, students will travel to a local business incubator and deliver professional product pitches to a panel of investors.

### 604D

Students may take this course for undergraduate college credits through Lehigh Carbon Community College's Dual Credit program.

### PERSONAL FINANCIAL MANAGEMENT 610/610D | GRADE 10-12



In this course students will gain practical life skills and knowledge necessary to maintain the finances of a household. Topics include paychecks, budgeting, income taxes, checking accounts, saving and investing, credit, buying a car or home, and insurance.

### 610D

Students may take this course for undergraduate college credits through Lehigh Carbon Community College's Dual Credit program.

# ACCOUNTING 1 606 | GRADE 9-12



In this course, students are introduced to accounting principles surrounding the basic accounting equation: Assets = Liabilities + Owner's Equity. Students will learn the steps of the accounting cycle and apply them to both a sole proprietorship and a partnership. Key areas of study include: analyzing transactions, creating journal entries, maintaining subsidiary ledgers, completing bank reconciliations and preparing financial statements. Automated accounting software will be used to complete a business simulation project at the end of the course.

# BUSINESS LAW 614 | GRADE 10-12



This course engages students in legal issues and cases that involve the laws that govern business and commerce. Topics include The Constitution and Court Systems, Torts, White-Collar Crimes, Contract Law, Consumer and Employment Law, and Property Law. This class implements real case studies, mock trials, and guest speakers in helping them understand methods and procedures for starting and running a business.



# BUSINESS AND COMPUTER APPLICATIONS (CONT'D.)

# **ACCOUNTING 2** 616/616D | GRADE 10-12

Credit:

### MICROSOFT® EXCEL 627 | GRADE 9-12

Credit: 0.5

In this course, students will continue their study of accounting principles and develop a comprehensive understanding of the transactions learned in Accounting 1. Key areas of study include: accounts payable, accounts receivable, inventory, plant assets, accrued/prepaid expenses, and accrued/unearned revenue. Automated accounting software and Microsoft Excel will be used.



### A1AD

Students may take this course for undergraduate college credits through Lehigh Carbon Community College's Dual Credit Program.

# INVESTING AND CORPORATE FINANCE 621 | GRADE 10-12

Credit: 0.5

This course will give students an understanding of the way individuals, businesses, and organizations raise, manage, invest, and use monetary resources over time. Students will be engaged in using fundamental and technical analysis of company information to better understand the internal and external impact that the U.S. economy and current market trends may have on the corporation. Students will get a hands-on understanding of investing basics and learn about the corporate world of finance by trading stocks online and creating a financial portfolio.

# MICROSOFT® OFFICE 623 | GRADE 9-12

Credit: 0.5

This course will provide students with the knowledge required to create documents using Microsoft Word, spreadsheets and databases using Microsoft Excel and Microsoft Access, and multimedia presentations using Microsoft PowerPoint and will include fundamental techniques. (Fulfills STEM requirement for graduation)

# MICROSOFT® WORD 625 | GRADE 9-12

Credit: 0.5

This course encompasses both core and advanced skills in Microsoft Word and will prepare students to take the Microsoft Office Specialist (MOS) test, if desired. MOS certification is the leading IT certification in the world. MOS enables students to become experts in the software by utilizing the full features and functionality of the Microsoft Office system. Many colleges are accepting the certification in lieu of taking a college level course. (Fulfills STEM requirement for graduation)

This course encompasses both core and advanced skills in Microsoft Excel and will prepare students to take the Microsoft Office Specialist (MOS) test, if desired. MOS certification is the leading IT certification in the world. MOS enables students to become experts in the software by utilizing the full features and functionality of the Microsoft Office system. Many colleges are accepting the certification in lieu of taking a college level course. (Fulfills STEM requirement for graduation)

# MICROSOFT® POWERPOINT 631 | GRADE 9-12

0.5

This course encompasses both core and advanced skills in Microsoft PowerPoint and will prepare students to take the Microsoft Office Specialist (MOS) test, if desired. MOS certification is the leading IT certification in the world. MOS enables students to become experts in the software by utilizing the full features and functionality of the Microsoft Office system. Many colleges are accepting the certification in lieu of taking a college level course. (Fulfills STEM requirement for graduation)

# **WEB DESIGN** 636 | GRADE 9-12

Credit: 0.5

This course is designed to give students basic web design and development. Students will learn how to create a basic webpage utilizing both HTML code and CSS, as well as WYSIWYG approach using the online sitebuilder, WIX. (Fulfills STEM requirement for graduation)

### ADOBE PHOTOSHOP/ILLUSTRATOR 638 | GRADE 9-12

Credit: 0.5

This course will provide students with the knowledge required to apply design principles to the multimedia areas of graphics and illustration. Professional quality software titles, Adobe Photoshop and Adobe Illustrator, will be utilized to prepare students for creating dynamic, interactive content to be used in both print and web based applications. (Fulfills STEM requirement for graduation)

# ADVANCED PHOTOSHOP 639 | GRADE 9-12

Credit: 0.5

This advanced course will expand students' knowledge in the area of graphic design through broadening their understanding of basic and advanced features of Adobe Photoshop. Using Adobe Photoshop will prepare students for creating dynamic, interactive content to be used in both print and online applications. Upon successful completion of the course, students will be prepared to complete the Adobe Certification Associate Exam in Visual Communications, using Adobe Photoshop. Students may also be able to receive college credit by becoming certified. (Fulfills STEM requirement for graduation)

Prerequisite: Successful completion of Adobe Photoshop/Illustrator

# BUSINESS AND COMPUTER APPLICATIONS (CONT'D.)



# SCHOOL STORE 1 645 | GRADE 9-12

Credit:

### MARKETING 1 670 | GRADE 9-12

Credit:

This course gives students the opportunity to gain experience in the world of retail and is designed to allow students to gain first-hand experience in running a small business in a school setting. Students learn useful skills associated with a retail business, including advertising, product design, inventory control, and customer service. Business theories will be taught in conjunction with the hands-on operation of the store.

SCHOOL STORE 2 647 | GRADE 10-12

Credit:

Students of School Store 2 will run the store and will understand a managerial perspective to retail and train the students of the School Store 1 class. Students will be responsible for the daily operations of a small retail store and specialize in school merchandise while incorporating entrepreneurial skills.

Ţ

Prerequisite: Successful completion of School Store 1

# INTRO TO MOBILE APP DEVELOPMENT 650 | Grade 9-12



This course will teach students how to create native apps across today's most popular major mobile device platforms and Web apps. Students will use a hands-on approach to develop 21st century skills of problem-solving, critical-thinking, and technical programming. Though apps continue to evolve, having a combination of 21st century skills and fundamental app development, students will be prepared to keep up with the ever changing technological world. (Fulfills STEM requirement for graduation)

This course will introduce students to the fundamentals of Business marketing. Topics include the role of marketing in a business, market research and segmentation, basic economics, developing a marketing plan, e-commerce, products, price strategies, placement of products and distribution, and promotional aspects of businesses. It is a basic intro course that allows students to gain skills from one of the core areas of business and allows room to proceed to Marketing 2.

## MARKETING 2 678 | GRADE 9-12

Credit:

This course is designed for students to focus on three specialized areas of marketing: Sports and Entertainment, Fashion, and Hospitality and Tourism. Students will explore each type of business and how promotions, advertising, and pricing strategies are specifically used in these three concentrations. A variety of learning tools will accompany the course including field trips and guest speakers as well as career exploration in the three marketing areas.



Prerequisite: Successful completion of Marketing 1



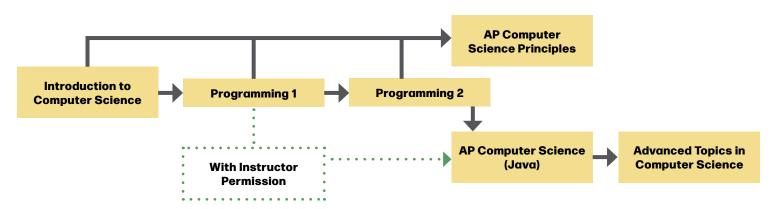
# COMPUTER SCIENCE DEPARTMENT



All of the computer science courses are electives and satisfy the STEM graduation requirement. They are highly recommended for students pursuing STEM careers. Prerequisites are stated as recommendations for success by most students. Students who wish to take advanced courses without having satisfied the prerequisites should either exempt a course by exam or gain permission from a member of the computer science department via an interview and proof of student work.

### **COMPUTER SCIENCE PATHWAY**

Note: Students who have completed Algebra I with an 80 percent or better can start at Programming I



# INTRODUCTION TO COMPUTER SCIENCE 321 | GRADE 9-12

Credit: 0.5

### PROGRAMMING 1 325 | GRADE 9-12

**0.5** 

This course is designed to introduce students to computer science concepts and simple programming techniques in a project-based environment. Projects incorporate the use of both drag-and-drop and text-based programming. The course will also include computer and Internet history, the basics of computer hardware and software, computer ethics, and careers in computer science. Students who have successfully completed Algebra 1 (80% or better) should begin the Computer Science sequence with Programming 1 instead. (Fulfills STEM requirement for graduation)

Prerequisite: Completion of Algebra 1 with an 80% or

This course is designed to enable all students to develop better problem solving skills that will prepare them for many different fields

of study and future computer science courses. Utilizing the Python

programming language, students will learn to write programs that include turtle graphics, input and output, decisions, loops, functions,

and strings. Topics in the first contest of the ACSL contest will also be

covered. Students interested in taking AP Computer Science A (Java) during the following school year should register for both Programming 1

and Programming 2. (Fulfills STEM requirement for graduation)

# COMPUTER SCIENCE DEPARTMENT (CONT'D.)



# PROGRAMMING 2 326 | GRADE 10-12

Credit:

This course is a continuation of Programming 1. Students will extend their knowledge of Python by writing programs that include strings, lists, text input and output, searching and sorting, and recursion. Students will also transition to Java programming language in preparation for the AP Computer Science A (Java) course. (Fulfills STEM requirement for graduation)



Prerequisite: Recommended 80% or better in Programming 1

# ADVANCED PLACEMENT COMPUTER SCIENCE PRINCIPLES



### 363 | GRADE 10-12 ONLY

AP Computer Science Principles is an introductory college-level computing course that introduces students to the breadth of the field of computer science. Students learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They incorporate abstraction into programs and use data to discover new knowledge. Students also explain how computing innovations and computing systems—including the internet—work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. This course is not meant for those planning to major in computer science in college. Those students should take AP Computer Science A. (Fulfills STEM requirement for graduation)



Prerequisite: Recommended 80% or higher in Algebra 1

# ADVANCED PLACEMENT COMPUTER SCIENCE A (JAVA) 365 | GRADE 10-12



This course will cover the entire curriculum as prescribed by the College Board for a one semester college course in computer science. This includes control structures, arrays, strings, classes, interfaces, files, and efficiency of algorithms. Upon completion of this course, students will be prepared to take the AP Computer Science A level exam. Students will be expected to engage in rigorous problem solving activities and utilize computer resources outside of class. (Fulfills STEM requirement for graduation)



Prerequisite: Recommended 80% or better in Programming 1 and Programming 2.

**Note:** Instructor permission may be granted on an individual basis for students who have only completed Programming 1. A summer JAVA assignment will be required for these students

# ADVANCED TOPICS IN COMPUTER SCIENCE (AP WEIGHT) 368 | GRADE 11-12



This course will build on a solid foundation of computing methodology to introduce students to advanced representation and processing of data. Topics will include algorithm efficiency, recursion, inheritance, and dynamic memory allocation. Students will learn how to process data that is stored as strings, arrays, stacks, queues, linked lists, sets, maps, files, and tree structures to solve a variety of real life application problems. This course includes second semester collegelevel computer science topics. Students will be expected to engage in rigorous problem solving activities and utilize computer resources outside of class. (Fulfills STEM requirement for graduation)

Prerequisite: Recommended 80% or better in AP Computer Science A (Java)



# DRIVER EDUCATION DEPARTMENT



Driver Education is a required course and a graduation requirement. Driver Education emphasizes personal and social problems related to the safe and efficient movement of traffic.

# DRIVER EDUCATION DEG | GRADE 10-12 ONLY



Driver Education is a required course usually taken in the sophomore year. Driver Education emphasizes personal and social problems related to the safe and efficient movement of traffic. Major aims are to emphasize the desirable role of the pedestrian and driver in traffic and to develop the knowledge and attitudes needed for safe use of traffic facilities. Students will take this course online, except when online instruction is not appropriate for a student's instructional needs. In such cases, the course will be offered in a face-to-face format.

### DRIVER TRAINING Ages 16, 17, 18

Driver Training is an elective course offered to 16-year-old students. Each student must have parental permission to drive a motor vehicle. A learner's permit must be obtained by the student. Driver Training consists of nine hours of simulation, and three hours of behind-thewheel instruction. The purpose of the twelve-hour course is to develop, through the use of realistic situations, the knowledge, attitudes and skills necessary for safe and efficient operation of the automobile in urban, rural and superhighway traffic. There is an additional fee associated with Driver Training. Interested students must register for this course on the **Driver's Training page** on the EHS website.

### PA DRIVER'S EXAMINATION

Emmaus High School has been certified by the Pennsylvania Department of Transportation to administer the PA Driver's Examination. We are able to test our students and determine whether they meet the state standards for driver licensing.

In order for a student to take the Driver's Examination, the following guidelines must be satisfied:

- Currently enrolled in Driver Training
- Attendance at simulation classes must be up-to-date
- Successfully completed Driver Education
- Registration fee for Driver Training has been paid
- Regular permit (not a temporary permit)
- Form 180C must be signed in the presence of an instructor or be notarized
- Recommended by the driving instructor
- Demonstrated the skills and maturity for a driver's license

## ENGLISH DEPARTMENT





Each high school student must take and pass a ninth, a tenth, an eleventh, and a twelfth grade English course to graduate. Students should choose, with the help of parents, teachers, and school counselors, the program best suited to their abilities and future plans. Each student should choose the appropriate English course offered in a grade level. In addition to a literature survey component, all non-elective English courses provide writing activities and research, vocabulary study, study skills and career awareness instruction. Those who are undecided about going to college should choose college preparatory English. Note that all elective courses will not be counted toward meeting English graduation requirements.

Summer reading assignments are required for all Emmaus High School English courses. The summer reading assignment list can be found on the Emmaus High School website.

#### NINTH GRADE ENGLISH

#### 111 | NC44

Credit:

In the 9th grade course, students will respond to literary works orally through inquiry-based class discussion, peer to peer discussion, and more formal presentation activities. Additionally, students will respond to literature in writing on a regular basis, which may take the form of homework, journaling, and informal and formal essays. Through the workshop model, students will explore the elements of brainstorming, outlining, writing, peer-editing, revising and proofreading, and publishing their work. Research and analysis will emphasize a scaffold approach in which students develop skills such as writing a thesis, finding and evaluating secondary sources, and synthesizing primary and secondary source information. Besides teacher-selected titles, the study of literature will be augmented with student selections during independent reading time and Literature Circles. Grammar and vocabulary instruction will be utilized to assist students in the processes of reading and writing. The literature of this course will focus on high-interest touchstones of American, British, and World literature, including novels, plays, poems, short stories, and nonfiction. This curriculum of this course is aligned to the PA Core Standards. Students in this course will focus on foundational, conceptual, and exploratory learning targets in reading, writing, and communications in preparation for successful performance in a college setting. The course includes a self-selected summer reading requirement.

### NINTH GRADE ENGLISH, HONORS

#### 150 | NC44.

Credit:

In the 9th grade honors English course students will respond to literary works orally through inquiry-based class discussion, peer to peer discussion, and more formal presentation activities. Additionally, students will respond to literature in writing on a regular basis, with a focus on expository, argumentative, and analytical essay writing. Through the workshop model, students will explore the elements of brainstorming, outlining, writing, peer-editing, revising and proofreading, and publishing their work. Research and analysis will emphasize a scholarly approach in which students practice skills such as writing a thesis, finding and evaluating secondary sources, and synthesizing primary and secondary source information. Besides teacher-selected titles, the study of literature will be augmented with student selections during independent reading time and Literature Circles. Grammar and vocabulary instruction will be utilized to assist students in the processes of reading and writing. The literature of this course will focus on high-interest touchstones of American, British, and World literature, including novels, plays, poems, short stories, and nonfiction. The curriculum of this course is aligned to the PA Core Standards. The ninth grade English honors course has been developed as the first level of the secondary honors/Pre-Advanced Placement track in the language arts area. Students selecting this course exhibit a high level of independence and motivation appropriate for accelerated curricula and have demonstrated strengths in English Language Arts. Honors courses will extend the depth of study through more rigorous materials and activities promoting higher-level thinking skills such as analysis, synthesis, and evaluation. The course includes assigned summer reading requirements.



### **TENTH GRADE ENGLISH**

118 | **NC44**.



In the 10th grade course, students will respond to literary works orally through inquiry-based class discussion, peer to peer discussion, and more formal presentation activities. Additionally, students will respond to literature in writing on a regular basis, which may take the form of homework, journaling, and informal and formal essays. Through the workshop model, students will explore the elements of brainstorming, outlining, writing, peer editing, revising and proofreading, and publishing their work. Research and analysis will emphasize increasing independence as students reinforce skills such as writing a thesis, finding and evaluating secondary sources, and synthesizing primary and secondary source information. Besides teacher selected titles, the study of literature will be augmented with student selections during independent reading time and Literature Circles. Grammar and vocabulary instruction will be utilized to assist students in the processes of reading and writing. The literature of this course will focus on high-interest touchstones of American, British, and World literature, including novels, plays, poems, short stories, and nonfiction. The curriculum of this course is aligned to the PA Core Standards. Students will focus on further developing foundational, conceptual, and exploratory learning targets in reading, writing, and communications. The literary rigor of selections and student work will increase appropriately for a student following a college-bound track. The course includes a self-selected summer reading requirement. The Keystone exam will be administered while students are enrolled in this course.

### TENTH GRADE ENGLISH, HONORS

151 | **NC44**.



In the 10th grade honors course, students will respond to literary works orally through inquiry based class discussion, peer to peer discussion, and more formal presentation activities. Additionally, students will respond to literature in writing on a regular basis, with a focus on expository, argumentative, and analytical essay writing. Through the workshop model, students will reinforce the elements of brainstorming, outlining, writing, peer-editing, revising and proofreading, and publishing their work. Research and analysis will emphasize a scholarly approach in which students practice skills such as writing a thesis, finding and evaluating secondary sources, and synthesizing primary and secondary source information. Besides teacher-selected titles, the study of literature will be augmented with student selections during independent reading time and Literature Circles. Grammar and vocabulary instruction will be utilized to assist students in the processes of reading and writing. The literature of this course will focus on high-interest touchstones of American, British, and World literature, including novels, plays, poems, short stories, and nonfiction. The curriculum of this course is aligned to the PA Core Standards. The tenth grade English honors course has been developed as the second level of the secondary honors/Pre-Advanced Placement track in the language arts area and is intended for students who will pursue college-level courses in the eleventh and twelfth grade. Students selecting this course exhibit a high level of independence and motivation appropriate for accelerated curricula and have demonstrated strengths in English Language Arts. Honors courses will extend the depth of study through more rigorous materials and activities promoting higher-level thinking skills such as analysis, synthesis, and evaluation. The course includes assigned summer reading requirements. The Keystone exam will be administered while students are enrolled in this course.

# ELEVENTH GRADE ENGLISH, GENERAL PREPARATORY 1241 NC44

Credit:

Students in 11th grade General Preparatory courses will focus on developing foundational, conceptual, and exploratory learning targets in reading, writing, and communications. Structured in a workshop model, students will respond to literary works orally through inquiry-based class discussion, peer to peer discussion, and informal presentation activities. Additionally, students will respond to literature in writing on a regular basis, which may take the form of homework, journaling, and informal and formal essays. Through the workshop model students will practice the elements of brainstorming, outlining, writing, peer-editing, revising and proofreading, and publishing their work. Research and analysis will emphasize practical aspects such as comparing and contrasting primary source material and supporting an opinion with accurately documented scholarly information. Besides teacher-selected titles, the study of literature will be augmented during independent reading time and Literature Circles. Grammar and vocabulary instruction will be utilized to assist students in the processes of reading and writing. This course will focus on high-interest touchstones of American literature, including novels, plays, poems, short stories, and nonfiction. The curriculum of this course is aligned to the PA Core Standards. The course includes a self-selected summer reading requirement.



## ELEVENTH GRADE ENGLISH, COLLEGE PREPARATORY

126 | **NC44**.



In the 11th grade College Preparatory course, students will respond to literary works orally through inquiry-based class discussion, peer to peer discussion, and more formal presentation activities. Additionally, students will respond to literature in writing on a regular basis, which may take the form of homework, journaling, and informal and formal essays. Through the workshop model students will practice the elements of brainstorming, outlining, writing, peer-editing, revising and proofreading, and publishing their work. Research and analysis will emphasize independence as students reinforce skills such as writing a thesis, finding and evaluating secondary sources, and synthesizing primary and secondary source information. Besides teacher-selected titles, the study of literature will be augmented during independent reading time and Literature Circles. Grammar and vocabulary instruction will be utilized to assist students in the processes of reading and writing. This literature of this course will focus on high-interest touchstones of American literature, including novels, plays, poems, short stories, and nonfiction. The curriculum of this course is aligned to the PA Core Standards. Students in College Preparatory courses will focus on developing and mastering foundational, conceptual, and exploratory learning targets in reading, writing, and communications in preparation for successful performance in a college setting. The literary rigor of selections and student work will increase appropriately for a student following a college-bound track. The course includes a self-selected summer reading requirement.

# ELEVENTH GRADE ENGLISH, HONORS DC 152DC | NC44.

Credit:

In the 11th grade honors course, students will respond to literary works through inquiry-based class discussion, peer to peer discussion, and more formal presentation activities. Additionally, students will respond to literature in writing on a regular basis with an emphasis on research; this course will emphasize a scholarly approach to writing in which students further develop skills such as finding and evaluating secondary sources, synthesizing primary and secondary source information, and integrating sources. Students will strive for sound logic, effective use of details, appropriate diction, and correct grammar and mechanics. Students will study models of writing, including student essays and professionally-written essays. Honors courses will extend the depth of study through more rigorous materials and activities promoting higher level thinking skills such as analysis, synthesis, and evaluation. The course includes assigned summer reading requirements. Students may take this course for undergraduate college credits through Lehigh Carbon Community College's Dual Credit program.



Prerequisite: Passing score of LCCC placement test during the course may be required for Dual Credit designation.

# ELEVENTH GRADE ENGLISH, ADVANCED PLACEMENT LANGUAGE AND COMPOSITION 162 | NC44.

Credit:

Advanced Placement course syllabi are approved by the district and the College Board. As designated by the College Board, "The AP English Language and Composition course aligns to introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods." The course also includes vocabulary study and a formal research paper. The course prepares students to take the AP Exam, the successful completion of which can serve as college credit. The course includes assigned summer reading requirements.

I

Prerequisite: Recommendation of English department and recommended 84% or better in Tenth Grade English, Honors.



## TWELFTH GRADE ENGLISH, GENERAL PREPARATORY

134



In the 12th grade General Preparatory course, students will respond to literary works orally through inquiry-based class discussion, peer to peer discussion, and informal presentation activities. Additionally, students will respond to literature in writing on a regular basis, which may take the form of homework, journaling, and informal and formal essays. Through the workshop model students will practice the elements of brainstorming. Students will practice the principles of the writing workshop, including the elements of brainstorming, outlining, writing, peerediting, revising and proofreading, and publishing their work. Research and analysis will emphasize practical aspects such as supporting an opinion with accurately documented scholarly information. Besides teacher-selected titles, the study of literature will be augmented during independent reading time and Literature Circles. Grammar and vocabulary instruction will be utilized to assist students in the processes of reading and writing. This course will focus on World literature, including novels, plays, poems, short stories, and nonfiction. The curriculum of this course is aligned to the PA Core Standards. Students in twelfth grade General Preparatory courses will focus on mastering foundational and developing conceptual and exploratory learning targets in reading, writing, and communications. Structured in a workshop model, students will respond to literary works orally through inquiry-based class discussion, peer to peer discussion, and informal presentation activities. Additionally, students will respond to literature in writing on a regular basis, which may take the form of homework, journaling, and informal and formal essays. Through the workshop model students will practice the elements of brainstorming, outlining, writing, peer-editing, revising and proofreading, and publishing their work. Research and analysis will emphasize practical aspects such as supporting an opinion with accurately documented scholarly information. Besides teacher-selected titles, the study of literature will be augmented during independent reading time and Literature Circles. Grammar and vocabulary instruction will be utilized to assist students in the processes of reading and writing. The course includes a self-selected summer reading requirement.

# TWELFTH GRADE ENGLISH, COLLEGE PREPARATORY 138 | NC44.

Credit:

In the 12th grade College Preparatory course, students will respond to literary works orally through inquiry-based class discussion, peer to peer discussion, and more formal presentation activities. Additionally, students will respond to literature in writing on a regular basis, which may take the form of homework, journaling, and informal and formal essays. Through the workshop model students will practice the elements of brainstorming, outlining, writing, peer-editing, revising and proofreading, and publishing their work. Research and analysis will emphasize independence as students reinforce skills such as writing a thesis, finding and evaluating secondary sources, and synthesizing primary and secondary source information. Besides teacher-selected titles, the study of literature will be augmented during independent reading time and Literature Circles. Grammar and vocabulary instruction will be utilized to assist students in the processes of reading and writing. This course will focus on high-interest touchstones of World literature, including novels, plays, poems, short stories, and nonfiction. The curriculum of this course is aligned to the PA Core Standards. Students in College Preparatory courses will focus on developing and mastering foundational, conceptual, and exploratory learning targets in reading, writing, and communications in preparation for successful performance in a college setting. The literary rigor selections and student work will increase appropriately for a student following a college-bound track. The course includes a self-selected summer reading requirement.

### TWELFTH GRADE ENGLISH, HONORS DC 154DC

Credit:

The 12th grade honors course is a survey of literature depicting a wide range of human experiences, introducing concepts useful for analyzing and interpreting fiction, poetry, and drama. Students will consider relevant, credible resources as they examine relationships between literary significance and social position, inequality, cultural contexts, and political power. Students will respond to literature in writing on a regular basis, and will extend their depth of study through more rigorous materials and activities promoting higher level thinking skills such as analysis, synthesis, and evaluation. The course includes assigned summer reading requirements. Students may take this course for undergraduate college credits through Lehigh Carbon Community College's Dual Credit program.

Prerequisite: Passing score of LCCC placement test during the course may be required for Dual Credit designation

For the 2024-2025 school year- In order to earn the dual credit from LCCC for English 12 Honors DC at EHS, students will also need to take/pass ENG 105. (Research & Composition) at LCCC during the summer. A passing grade in ENG 105 is required by LCCC, as this is a prerequisite, before enrolling in ENG 106. With that said, enrolling in English 12 Honors at EHS does NOT require you to take it for dual credit at LCCC and not taking ENG 105 this summer will not impact your ability to take English 12 Honors DC at EHS. However, taking the course as dual credit is an option for those who do take and pass ENG 105 at LCCC during the summer. Please reach out to the counselor if you have any questions.



### **SENIOR HUMANITIES, HONORS**

#### 950 | GRADE 12 | NC44.

**SOCIAL STUDIES:** 

Credit:

**ENGLISH:** 



This course will examine human endeavors from the perspectives of philosophy, culture, history, and aesthetics. Focusing on the Western Tradition, the course will endeavor to connect the cultural traditions, philosophies, and values of the time period to the art and literary texts produced. Furthermore, the course proposes to illustrate how the Western Tradition informs our current culture. Using a mix of ancient, medieval, and modern texts in a variety of mediums. The exploration of the Western Tradition will require reading, informal and expository writing, analytical thinking and problem-solving skills, and visual and musical literacy. The course requires a team approach for many activities, encouraging students to develop communication and collaborative skills. Each student will be required to complete a research paper, emphasizing a scholarly approach in which students practice skills such as thesis writing, finding and evaluating secondary sources, and synthesizing primary and secondary source information. Word study will focus on appropriate terminology specific to the disciplines of art, music, literature, and history. The course includes summer assignments for all disciplines: art, music, literature, and history. This course runs everyday for the full school year.



Prerequisite: Admission by application

# TWELFTH GRADE ENGLISH, ADVANCED PLACEMENT LITERATURE AND COMPOSITION 160 | NC44.



Advanced Placement course syllabi are approved by the district and the College Board. As designated by the College Board, "The AP English Literature and Composition course aligns to an introductory college-level literary analysis course. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works." The course also includes an exploration of literary theory, an intertextual research component, and vocabulary study. The course prepares students to take the AP Exam, the successful completion of which may serve as college credit. The course includes assigned summer reading requirements. Prerequisite: Recommendation of English department and recommended 84% or better in eleventh grade English Honors or AP Language and Composition.

\_

Prerequisite: Recommendation of English department and recommended 84% or better in eleventh grade English Honors or AP Language and Composition.



The following elective courses are available to all students in any of the English programs:

#### **JOURNALISM 1**

100 | GRADE 9-12 | **NC44**.

Credit:

Through an emphasis on print journalism, students develop the traits typical of and essential for all beginning reporters and writers as they develop an increasing awareness of their world. They achieve that goal through a mixture of instruction and writing of news, feature, and opinion pieces. This is a writing class, and students are expected to conduct interviews and write stories on an ongoing basis. On average, a new story is completed within three weeks. Public relations and advertising are also explored in the class. Upon completion of the course, students will have developed a writing portfolio of journalistic pieces.

### JOURNALISM 2 110 | GRADE 10-12

Credit:

### JOURNALISM 3 120 | GRADE 11-12

suitable for publication in The Stinger.

Credit:

Through an emphasis on print journalism, students develop the traits typical and essential for all good reporters and writers as they develop an increasing awareness of their world. They achieve that goal through a mixture of instruction and production tied to the planning and writing of news, features, sports, and opinion stories. The course is writing-project based. During the course, students jointly or independently plan and produce original stories of the following types: spot news (a press conference), round-up, poll, follow-up, sidebar, brief, meeting, district and community feature, trend story, review, speech, sports advance, game story, player profile, column, and editorial perspective. Students are encouraged to develop articles suitable for publication in The Stinger.

sm 1

Prerequisite: Recommended 80% or better in Journalism 2

This is largely a section editor's course for print journalism students.

Page design and production is the core of the instruction and hands-on

work. Students, who work on or lead editorial teams, thrive on planning,

preparing, and contributing to each issue of The Stinger. Students are

exposed formally and informally to career options for those interested

Students will submit numerous layouts and designs on school, as well

as community-based topics and are encouraged to develop articles

in pursuing further study of working in the communications field.

Ţ

Prerequisite: Recommended 70% or better in Journalism 1



## JOURNALISM 4 130 | GRADE 12



PUBLIC SPEAKING AND DEBATE

104 | GRADE 10-12 | NC44

Credit:

Students work more independently to lead publication teams in regular planning, editing, and production of The Stinger. Interested students must apply and be approved for editor positions as they will individually and collaboratively plan and produce in-depth projects for real-world publications as well as electronic, new media initiatives based upon student interest and demand in ongoing deadline situations. Additional media avenues are open because of the smaller corps of students.

Students will experience and use techniques involved in both formal and informal speaking situations. They will be introduced to the various purposes of speaking to an audience: to inform, to convince, to entertain, to impress, and to motivate. Methods of presentation will involve impromptu, extemporaneous, and scripted speeches, as well as debate. Instruction will be provided in gathering material necessary for some of the speech situations.



3

Prerequisite: Successful completion of 9th grade English

### THEATER 1 101 | GRADE 9-12



Credit:

0.5

This course will show students that theater is a vital and exciting art form. Students will explore and participate in pantomime, improvisation, acting, scene design, stagecraft, lighting, and costume design. The history, development, and elements of theater will be examined.

### INTRO TO BROADCAST STUDIO AND FILM PRODUCTION



105 | GRADE 9-12

THEATER 2 102 | Grade 9-12

This course continues the study of the performance skills introduced in Theater 1. Students will develop additional techniques of concentration, pantomime, improvisation, sense recall, emotional recall, stage movement and characterization. Students will then progress to comprehensive scene study with the emphasis on utilizing those skills mastered.

where media technologies – video, film, Internet, smartphone, etc. are converging into an inter-related digital mosaic. The course will begin with a study of man's quest to communicate and will focus on the convergence of media and culture from a historical perspective. Students will learn the basic pre-production skills of researching, storyboarding, and script writing, and will advance to learning various production and post-production skills including the operation of audio, video, and editing equipment. Students develop skills such as filming, directing, editing, and film analysis. Students create various video projects across multiple genres. Whether a student is interested in pursuing a career in media or simply has an interest in communications, this course will provide the necessary basics.

This course provides the foundation for future courses of study that

will prepare our students to communicate more effectively in a world



**Prerequisite: Theater 1** 

## THEATER 3/ ACTING STUDIO 103 | GRADE 10-12



This course will continue the development of skills introduced in Theater 1 and Theater 2. Theater 3/Acting Studio will focus on an intensive approach to character development and scene study with an emphasis on the Stanislavski approach to acting. Students will study a variety of acting and directing styles. Each student will develop a portfolio of monologues and scenes suitable for the audition process. The course will offer each student the opportunity to perform in the classroom and for public audiences.





experience working in a television studio to contribute to our ETV broadcast. Our broadcast includes school announcements, weather, sports, local and national news events, and student-created features involving our school and community. Students write and produce all segments of the broadcast and run the technical aspects of our show as well. Students produce broadcast-ready "packages" of school and community events to air during our broadcast. Our tech team and on-air team work together to produce a high quality show each day. Students develop and refine skills such as lighting and sound studies, filming, directing, editing, and film analysis. In addition to the production of our morning broadcast, students create various films across multiple genres. Any student who has successfully completed Intro to Broadcast Studio and Film Production is eligible to sign up for this course

The goal of this course is to provide students with an authentic



**Prerequisite: Theater 2** 

Į.

Intro to Broadcast Studio and Film Production



# BROADCAST STUDIO AND FILM PRODUCTION 3/ETV 125 | GRADE 11-12

Credit:

# CREATIVE WRITING 106 | GRADE 10-12 | NC44.

Credit:

This course is a continuation of Broadcast Studio and Film Production 2 that provides students with an authentic experience working in a television studio to produce a live broadcast each morning. Our broadcast includes school announcements, weather, sports, local and national news events, and student-created features involving our school and community. Students write and produce all seaments of the broadcast and run the technical aspects of our show as well. Students produce broadcast-ready "packages" of school and community events to air during our broadcast. Our tech team and on-air team work together to produce a high quality show each day. In addition to creating a portfolio of film projects, Broadcast Studio and Film Production 3 students will lead production teams in the creation of seaments and packages for our live newscast, and will lead and direct teams in the production of creative and documentary films. Students refine and master skills such as lighting and sound studies, filming, directing, editing, and film analysis. In addition to the production of our morning broadcast, students create various films across multiple genres. Any student who has successfully completed Intro to Broadcast Studio and Film Production AND Broadcast Studio and Film Production 2 is eligible to sign up for this course. However, each year's team is selected via an audition/interview process.

## BROADCAST STUDIO AND FILM PRODUCTION 4/ETV 135 | Grade 12

Credit:

This course is a continuation of Broadcast Studio and Film Production 3/ETV studio that provides students with an authentic experience working in a television studio to produce a live broadcast each morning. Our broadcast includes school announcements, weather, sports, local and national news events, and student-created features involving our school and community. Students write and produce all segments of the broadcast and run the technical aspects of our show as well. Students produce broadcast-ready "packages" of school and community events to air during our broadcast. Our tech team and on-air team work together to produce a high quality show each day. In addition to creating a portfolio of film projects, Broadcast Studio and Film Production 4 students will lead production teams in the creation of segments and packages for our live newscast, and will lead and direct teams in the production of creative and documentary films, interface with local businesses to produce news segments and commercials to be aired on our school newscast, lead production responsibilities for our daily newscast, and generate project ideas based on the needs of our school and community. Students master skills such as lighting and sound studies, filming, directing, editing, and film analysis. In addition to the production of our morning broadcast, students create various films across multiple genres. Any student who has successfully completed Intro to Broadcast Studio and Film Production, Broadcast Studio and Film Production 2, and Broadcast Studio and Film Production 3 is eligible to sign up for Broadcast Studio and Film Production 4. However, each year's team is selected via an audition/interview process.

This course provides students with the opportunity to experiment in the creative writing process, while also helping young writers accurately evaluate their own products. Students will read, critique, and write a variety of creative forms: short stories, poetry, one-act plays, and personal narratives, to name a few. All students will be expected to share these writings with the entire class; some oral reading can be expected on occasion. Students may have the opportunity to explore various websites related to creative writing and/or create movies of their favorite works. Finally, students will submit one or two of their most promising creations to Collage, Emmaus High School's literary and fine arts magazine.

# READING SEMINAR RSEM

Credit:

In the Reading Seminar course students will refine their reading skills through an emphasis on reading strategies, systematic reading behaviors, and writing about reading. This course employs research-based practices with the goal of helping students to learn and to apply the skills of an effective reader, not only in reading class, but as they read across the curriculum. Students are recommended for this course based on formative and summative assessment data and scheduled as available. This course is taken in conjunction with a grade level English course and can be taken multiple times, as needed.

# LITERATURE STANDARDS ENCR

Credit:

In this course, students will learn/review strategies and practice skills related to "Reading for Meaning" and "Analyzing and Interpreting Literature" for both fiction and nonfiction texts.

### 9TH AND 10TH ENGLISH LAB 910ENLABPF

Credit:

In this course, students will learn/review strategies and practice skills related to "Reading for Meaning" and "Analyzing and Interpreting Literature" for both fiction and nonfiction texts.

### 11TH AND 12TH ENGLISH LAB 1112ENLABPF

Credit:

In this course, grade level standards will be reviewed and practiced, providing students additional time and direct instruction in the area of English.



# ENGLISH LEARNERS (EL)



#### **ENGLISH LEARNER 1**

EL1

Credit:

Credit:

2

English Learner 1 is a course for beginning English Learners. Learners will utilize the **National Geographic Edge Fundamentals** curriculum including the textbook and supporting materials. This course provides students with beginning exposure to the English language in the areas of reading, writing, speaking, and listening. Students will be exposed to various types of fiction and non-fiction texts as well as begin to develop their academic writing through vocabulary studies. Assessments and instruction incorporate strategies for meeting the needs of beginning English learners and are aligned with the Common Core State Standards and National Geographic's Fundamentals.

ļ.

Enrollment in Fundamentals is dependent upon WIDA scores and teacher recommendation.

#### **ENGLISH LEARNER 2**

EL2

Intermediate English Learners will utilize the **National Geographic Edge A** curriculum including the textbook and supporting materials. This course provides students with a broad exposure to the English language in the areas of reading, writing, speaking, and listening. Students will develop solid English reading skills, be exposed to various genres of text, and will learn to incorporate increasingly sophisticated and complex writing skills to bolster success in all academic classes. Assessments and instruction incorporate strategies for meeting the needs of Intermediate English language learners and are aligned with the Common Core State Standards and National Geographic's Edge, Level A.



Enrollment in the class is dependent upon WIDA scores and teacher recommendation.

### **ENGLISH LEARNER 3**

EL3



Intermediate English Learners will utilize the **National Geographic Edge B** curriculum including the textbook and supporting materials. In this course, students will engage in all language domains (listening, speaking, reading, and writing) so that they can further improve and refine their overall communication and academic language in English. Students will read and respond to increasingly challenging literature

and non-fiction texts, with vocabulary and grammar instruction interwoven throughout. Assessments and instruction incorporate strategies for meeting the needs of intermediate English learners and are aligned with the Common Core State Standards and National Geographic's Edge, Level B.



Enrollment in the class is dependent upon WIDA scores and teacher recommendation.

#### **ENGLISH LEARNER 4**

EL4



Advanced students will utilize the National Geographic Edge C text which focuses on a variety of fictional literature, including short stories, novel excerpts, and poetry. This course also focuses on improving the academic reading and writing skills of long-term English Language Learners through an emphasis on academic vocabulary, syntax, and grammar. Students will increase their oral language and writing skills through the use of high-interest nonfiction texts with a focus on summarizing, justification, argument, and research. Placement in low advanced or high advanced depends on WIDA score and teacher recommendation. This course will develop the student's reading and writing skills, aligned with the Common Core State Standards and National Geographic's Edge, level C.



Placement into this course is dependent upon annual WIDA scores and teacher recommendation. Students also need to take an English class in conjunction with this course.

#### **ENGLISH LEARNER 5**

EL5



This course is designed for students who have a very high level of English ability (almost "on par" with native English speakers), but still need some support and/or fine-tuning of their academic English skills (Reading, Writing, Speaking, and/or Listening). The bedrock of this course is National Geographic Edge C curriculum, Level C (the highest level). The text revolves around a variety of on-grade level literature and nonfiction texts. It aims to improve students' academic English skills through an emphasis on comprehension of carefully chosen reading materials, vocabulary development, and grammar refinement. The course will help to develop students' skills in summarizing, justification, argument, and research. It is aligned with the PA Common Core State Standards and National Geographic's Edge, Level C.



Placement into this course is dependent upon annual WIDA scores and teacher recommendation. Students also need to take an English class in conjunction with this course.

## FAMILY & CONSUMER SCIENCES DEPARTMENT





Family and Consumer Sciences education empowers individuals and families across the life span to manage the challenges of living and working in a diverse, global society. Our unique focus is on families, work, and their interrelationships.

## CHILD DEVELOPMENT 1 800 | GRADE 9-12

Credit: 0.5

Students will learn about the developing child from the prenatal stage through age 5. They will be able to distinguish and understand the interrelatedness of a child's development. Students will evaluate the roles and responsibilities of parenting and discuss the societal trends at different stages of the life cycle.

### CHILD DEVELOPMENT 2 810 | Grade 10-12

Credit:

Child Development 2 comprises a practical early childhood experience based in the Emmaus High School Preschool program. Students develop, plan, teach, and evaluate activities for 3, 4 and 5 year old children and conduct observations to learn more about the cognitive, social, emotional, and physical development of young children.

Prerequisite: 75% or better in Child Development 1 AND application process is required.

\*\* Application can be found on the **Program of Studies website** 

## CHILD DEVELOPMENT 3 820 | GRADE 11-12

Credit:

This course will expand on the knowledge and experience gained in Child Development 2. Students continue their interaction and participation in the on-site preschool for 3, 4 and 5 year olds. Students will evaluate preschoolers' physical, intellectual, emotional and social development. Students plan, teach and evaluate lessons in the preschool setting using Developmentally Appropriate Practices (DAP's).

Prerequisite: 75% or better in Child Development 2 AND application process is required.

\*\* Application can be found on the **Program of Studies website** 

## CREATIVE FOODS 801 | GRADE 10-12

Credit:

This course gives students the opportunity to develop and enhance their basic cooking skills. Emphasis is placed on the fundamentals of

preparing, cooking and serving food with consideration for nutrition and cost, safety and hygiene, consumer skills, and using small kitchen equipment wisely. Course includes a theory and lab component. *This course is not recommended for students with food allergies.* 

### SKILLS FOR LIVING 802 | GRADE 9-10

Credit:

This course is intended to develop the ability to manage the eventual need for a balance among family, work and other activities. Units covered include family, child development, nutrition, and sewing. Time management and decision-making skills will be used to complete selected projects.

### DESIGNER SEWING/FASHION DESIGN 804 | GRADE 10-12

Credit:

This course brings the exciting world of fashion and sewing to life through an in-depth look at how the apparel industry works. It is designed for students who have interests in the field of design, apparel, textiles and clothing construction. Individual projects will provide students an opportunity to demonstrate acquired knowledge.

### INTERNATIONAL FOODS 805 | GRADE 10-12

Credit:

In this course, students will prepare a selection of dishes from around the world. They will explore a variety of foods unique to different countries and use them in dishes that represent the cuisine of Europe, Africa, the Middle East, Asia, Australia and Russia. Students will understand the similarities and differences in global food choices, and, by studying the geography, climate, history and customs of a country, will develop an awareness, respect and acceptance of different cultural groups from different parts of the world. Course includes a theory and lab component. *This course is not recommended for students with food allergies.* 

Prerequisite: Recommended 75% or better in Creative Foods.

RETURN TO THE TABLE OF CONTENTS



# FAMILY & CONSUMER SCIENCES DEPARTMENT (CONT'D.)

## ADVANCED FOOD PREPARATION 812 | GRADE 10-12

Credit: 0.5

### **POSITIVE WELL-BEING** 830 | GRADE 11-12

Credit: 0.5

Students will prepare, cook and serve meals that demonstrate a knowledge and understanding of the principles that guide meal planning including organization and management of time and budget, creativity, nutrition and safe food handling practices. Students will complete an in-depth study of foods and will analyze their food intake based on US dietary guidelines. Course includes a theory and lab component. This course is not recommended for students with food allergies.

Prerequisite: Recommended 75% or better in Creative

This course seeks to enhance a student's quality of life by focusing on increasing one's physical and mental well-being and overall happiness. Topics include happiness, nutrition, stress management, mindfulness, relationships, and self-esteem. Students will practice lifestyle changes such as gratitude, random acts of kindness, movement, exposure to nature, and reductions of social media to boost mood and manage stress. Students will learn how to create and maintain meaningful relationships, make healthy meals, overcome adversity, and improve one's self-esteem. This course is a half credit course and is available for students grades 11-12.

INDEPENDENT LIVING 822 | GRADE 11-12



This course explores the knowledge and skills necessary for living independently. Units include career choices, resume preparation, money management and budgeting, housing considerations, interior design, myPlate guidelines, and making confident consumer decisions.

# GIFTED SUPPORT PROGRAM

Please note that scheduling of all courses in this program is reserved for students who have been identified as gifted.

### THE HISTORY OF WESTERN PHILOSOPHY, HONORS



#### THE QUEST FOR THE DISTANT PAST, HONORS 982 | GRADE 9-12

Credit: 0.5

980 | GRADE 9-12 | NC44

This course explores the fundamentals of western philosophy. Students will read about and discuss the thoughts of philosophers from ancient Greece to modern times. Students will be encouraged to share their thoughts on questions that men and women have been pondering probably since the development of language. Primary sources from the major western philosophers will be utilized. Roundtable discussions and symposiums will be the staples of the course. The book, The Republic, by Plato will be read and analyzed throughout the semester.

This offering emphasizes an interdisciplinary approach to trace the development of human history and culture throughout the Paleolithic and Neolithic time periods. The timeframe for this course includes the emergence of certain hominids around 4.5 million years ago to the dawn of civilization in the Fertile Crescent around 5,000 years ago. Topics include famous fossil discoveries, important archeological discoveries and cultural and artistic breakthroughs. The course is not lecture based but instead will emphasize discovery learning. There will also be a local history piece relating to the Native Americans of the Lehigh Valley. The book, Guns, Germs and Steel, by Jared Diamond is read and analyzed throughout the semester.

## MATHEMATICS DEPARTMENT



The mathematics department is committed to mathematical literacy for all students at various levels of content depth. Students are strongly encouraged to complete Algebra 1, Algebra 2, and Geometry by the end of Grade 11. Calculators are permitted for use in most math classes. Scientific calculators are satisfactory for Algebra 1, Algebra 2 and Geometry. Graphing calculators, including the TI-84, or TI-84 Plus, and are used frequently in Precalculus, Statistics and Calculus, Prerequisites are stated as recommendations for success by most students.

#### **FOUNDATIONS OF MATH**

300



Credit:

This course reinforces foundational math concepts needed for success in Fundamentals of Algebra and Algebra 1. Students are placed into this course based on individual data, teacher recommendation, and data based on their 3-8 performance on state standardized testing. Through ongoing data collection, students will receive instruction designed to challenge them based on their needs and to provide remediation and/or enrichment when appropriate. The topics include arithmetic operations, number system, fractions, math facts, ratios, proportions, expressions, exponents, basic geometry, statistics, probability, graphing coordinates and deciphering word problems. The focus is on learning the conceptual understandings of mathematical processes and basic computational procedures.

#### FUNDAMENTALS OF ALGEBRA

Note: this course is not available for students who have

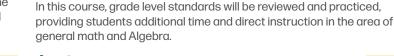


completed Algebra 1.

The course is designed to introduce students to the fundamentals of Algebra. The course will focus on the development of algebraic concepts while integrating the use of technology. This course will further develop students' mathematical skills, enhance their math proficiency, and teach students the skill set necessary for success in Algebra 1. Note: Students will be placed in this course based on teacher recommendation, previous course grades, and standardized test and benchmark scores that are below proficient. (Fulfills STEM requirement for graduation)

### **ALGEBRA 1** 306 | NC44.

This course is recommended as the first course for high school students and is a continuation of the topics that were started in Middle



**MALABPF** 

\*ALGEBRA 1

**MATH STANDARDS** 

306 | GRADE 9 | NC44.

(Fulfills STEM requirement for graduation)

This course is also offered as a double period semester class and MUST be taken in conjunction with the semester 314 Algebra 2 CP. The course is designed for students wishing to accelerate in math in order to take Calculus their senior year. (Fulfills STEM requirement for graduation)

Level Algebra. The content includes solving equations and inequalities,

exponents, polynomials, radicals and an introduction to data analysis. Students will complete the Keystone Exam at the end of this course.

Prerequisite: Recommended "C" or higher in Math Course

3 or successful completion of Fundamentals of Algebra

linear graphs and functions, systems of equations and inequalities,

Prerequisite: Recommended 90% or better in Math Course 3 or teacher recommendation

## **APPLICATIONS OF ALGEBRA 2** 308 | GRADE 10-11 | NC44

Elective

Credit:

Credit:

This course builds upon the skills learned in Algebra 1 and focuses on the application of those skills. The course will include the study of functions, quadratic and polynomial functions and their graphs, exponential functions, modeling data, and probability. (Fulfills STEM requirement for graduation).

Prerequisite: Successful completion of Algebra 1

RETURN TO THE TABLE OF CONTENTS





# MATHEMATICS DEPARTMENT (CONT'D.)

## ALGEBRA 2, COLLEGE PREPARATORY

314 NC44

This course builds upon the skills learned in Algebra 1. The course includes study of real numbers and complex numbers, quadratic equations, polynomials, factoring, logarithmic and exponential functions, rational expressions and equations, and radical expressions and equations. (Fulfills STEM requirement for graduation)



Prerequisite: Successful completion of Algebra 1 Honors OR recommended 70% or better in Algebra 1

# \*ALGEBRA 2, COLLEGE PREPARATORY 314 | GRADE 9 | NC44



Credit:

This course is also offered as a double period semester class and MUST be taken in conjunction with the semester 306 Algebra 1 CP. The course is designed for students wishing to accelerate in math in order to take Calculus their senior year. (Fulfills STEM requirement for graduation)



## ALGEBRA 2, HONORS

351 | **NC44**.



This course is an extension of the Algebra 2, College Preparatory course with inclusion of additional topics on quadratic and polynomial functions, joint variations, rational zeros, rationalizing the denominator, and probability and statistics. An entire unit on algebraic proofs is also included to adequately prepare the students for advanced mathematics courses. (Fulfills STEM requirement for graduation)



Prerequisite: Recommended 80% or better in Algebra 1 Honors OR recommended 90% or better in Algebra 1

### **GEOMETRY CONCEPTS**

310



This course employs an interactive, workplace-centered approach to learning geometric concepts. It is ideal for contextual learners. Geometric concepts are introduced, practiced, and applied in the context of the workplace. Students are encouraged to become active learners as they interact with the text to discover how a concept works, while increasing their capacity for problem solving. This course does not include the rigor of the Geometry CP course, but covers many of the same concepts including points, lines, planes, angles, congruence, triangles, circles, area, volume, right angle relationships, and similarity.



Prerequisite: Recommended completion of Algebra 1 AND Algebra 2 (Fulfills STEM requirement for graduation)

### GEOMETRY, COLLEGE PREPARATORY

312 | NC44



This course gives considerable attention to developing an understanding of the nature of deductive proof, the role of definitions and the meanings and uses of assumptions in writing proofs. Students are encouraged to think of geometry as a system requiring logic of thought as opposed to a less precise system based only upon observation and measurement. This course includes the study of both plane and solid figures. It is recommended that students take Algebra 1, Algebra 2, and Geometry, in that order, to ensure success on SAT's and upper level courses. (Fulfills STEM requirement for graduation)



Prerequisite: Recommended 70% or better in Algebra 2 CP OR recommended 80% or better in Algebra 2 Concepts

### **GEOMETRY, HONORS**

350 | **NC44**.



This course is designed for those students with an exceptional background in mathematics. The course promotes spatial perception and provides a more challenging approach to Euclidean geometry. Topics are studied in depth. In addition to the topics covered in Plane and Solid geometry, units on analytic proof and logic are included. (Fulfills STEM requirement for graduation)

Ī

Prerequisite: Recommended 80% or better in Algebra 1, Honors AND recommended 80% or better in Algebra 2, Honors

# PROBABILITY AND STATISTICS, COLLEGE PREPARATORY 315/315D | NC44



This course is designed to introduce students to the methods of collecting data for the purpose of analyzing and making inferences. Students will utilize real-life situations from the scientific and business communities to help reinforce the statistical methods applied in this course. Students will use graphing calculators and statistical software to enhance their understanding of the statistical methods taught in this course. (Fulfills STEM requirement for graduation)

Prerequisite: Recommended 70% or better in Algebra 2 CP



Students may take this course for undergraduate college credits through Lehigh Carbon Community College's Dual Credit program.

AND recommended 70% or better in Geometry CP

# MATHEMATICS DEPARTMENT (CONT'D.)



# INTERMEDIATE ALGEBRA 319/319D | GRADE 11-12 | NC44.

Credit:

An overview of basic algebraic concepts to prepare students for more advanced work in mathematics. Emphasizes fundamental operations, special products and factors, fractional expressions, functions and graphs, systems of equations, integer and fractional exponents, radicals, and quadratic equations and functions.



Prerequisite: Successful completion of Application of Algebra 2 or Geometry Concepts

#### 319D

Students may take this course for undergraduate college credits through Lehigh Carbon Community College's Dual Credit program.

\* Passing score of LCCC placement test during the course is required for Dual Credit designation

# PRECALCULUS, COLLEGE PREPARATORY 330/330D | NC44.



This course contains the mathematics intended for students preparing for higher education. Topics covering polynomial, exponential, logarithmic, trigonometric and circular functions, real numbers, algebraic manipulations, and sequences and series are studied. Completion of a summer review packet will be required. A graphing calculator is recommended, but not required. (Fulfills STEM requirement for graduation)



Prerequisite: Recommended 80% or better in Geometry CP OR recommended 70% or better in Geometry Honors AND recommended 80% or better in Algebra 2 CP OR recommended 70% or better in Algebra 2 Honors

#### 330D

Students may take this course for undergraduate college credits through Lehigh Carbon Community College's Dual Credit program.

# PRECALCULUS, ADVANCED PLACEMENT 359 | NCAA.



In this AP course, students will explore everyday situations and phenomena using mathematical tools and lenses. Students will build deep mastery of modeling and functions, and they examine scenarios through multiple representations. This course will prepare students for other college-level mathematics and science courses. The course will study each function type through their graphical, numerical, verbal, and analytical representations and their applications in a variety of contexts. Furthermore, students apply their understanding of functions by constructing and validating appropriate function models for

scenarios, sets of conditions, and data sets, thereby gaining a deeper understanding of the nature and behavior of each function type.



Prerequisite: Recommended 80% or better in Geometry, Honors OR recommended 90% or better in Geometry CP AND recommended 80% or better in Algebra 2, Honors.

# BUSINESS CALCULUS 345/345D | GRADE 11-12 | NCAA



Designed for students in business programs. Topics covered include linear, quadratic,polynomial, rational, exponential and logarithmic functions, differential and integral calculus of a single variable; and various applications to business and economics.



Prerequisite: Recommended 80% or better in Precalc, CP or recommended 70% in AP Precalculus

#### 345D

Students may take this course for undergraduate college credits through Lehigh Carbon Community College's Dual Credit program.

# ANALYTIC GEOMETRY AND CALCULUS (AB), ADVANCED PLACEMENT



360 | NC44.

This course is intended for students with thorough backgrounds in mathematics who plan to pursue higher mathematics or science in college. Students who satisfactorily complete this course will be prepared to take the College Board's A.P. Calculus (AB) exam. A full first semester college course will be presented including an extensive study of functions and graphs, limits, derivatives and methods of integration. Students who wish to take Advanced Calculus (Course #353) should plan to take AP Calculus (BC). This course requires frequent use of graphing calculators. It is strongly recommended that students have their own graphing calculator. \*\*This course is not a prerequisite for Advanced Calculus (AP weighted). (Fulfills STEM requirement for araduation)

Prerequisite: Recommended 80% or better in AP Precalculus OR recommended 85% or better in Precalculus, CP OR recommended 80% or better in Calculus, CP

# ANALYTIC GEOMETRY AND CALCULUS (BC), ADVANCED PLACEMENT



362 | NC44.

This course is intended for students with an exceptional knowledge of analytic geometry, elementary functions, algebra, geometry and trigonometry. Students who satisfactorily complete this course will be eligible to take the Advanced Placement Mathematics (BC) examination for possible college credit. Calculus (BC) is considerably more extensive than Calculus (AB) and represents the equivalent of a full year of college calculus. Topics to be studied include differentiation and



# MATHEMATICS DEPARTMENT (CONT'D.)

applications, integration and applications, transcendental functions, methods of integration, polar coordinates, vectors and equations, infinite series and differential equations. \*\*This course is a prerequisite for Advanced Calculus AP (weighted). This course requires frequent use of graphing calculators. It is strongly recommended that students have their own graphing calculator. (Fulfills STEM requirement for graduation)



Prerequisite: Recommended 92% or better in AP Precalculus

# ADVANCED CALCULUS (AP WEIGHTED) 353/353D | (AP WEIGHTED) | ACAA.



(AP weighted) This course is designed for those students who wish to study additional topics in Calculus but do not wish to matriculate to a local college. It is open to all students who have had AP Calculus BC. "C level" topics will be reviewed, paying particular attention to applications. Many facets of curve sketching will be examined including rectangular and spherical coordinates, vector analysis, and quadric surfaces. Multivariate Differential Calculus, including partial differentiation, gradients, and directional derivatives, and Integral Calculus, including iterated integration and line and flux integrals, will be studied. (Fulfills STEM requirement for graduation)



Prerequisite: AP Calculus BC (only)

#### 353D

Students may take this course for undergraduate college credits through Lehigh Carbon Community College's Dual Credit program.

#### STATISTICS, ADVANCED PLACEMENT

364 | NC44.



This course is designed for those students who want a solid background in statistics prior to attending college. Many college majors require a course in statistics; especially engineering, business, and social sciences. Four main components of the course include exploring data to discover patterns or departures from patterns, planning a study and deciding what and how to measure, anticipating patterns and producing models using probability theory and simulation, and drawing statistical inferences in order to select and confirm appropriate models. The course will include frequent use of technology and it is strongly recommended that students have their own graphing calculator. Students who satisfactorily complete this course will be eligible to take the Advanced Placement Statistics exam for possible college credit. (Fulfills STEM requirement for graduation)



Prerequisite: Recommended 80% or better in Precalculus, CP OR recommended 70% or better in Precalculus, Honors

## MUSIC DEPARTMENT





### **CONCERT CHOIR** 731/731A | GRADE 9-12

731A:

731:

# **CHORALE**

Credit: 1

Concert choir is a non-auditioned ensemble that provides a choral sinaina experience to any students in grade 9-12. Students are given the opportunity to develop individual singing abilities as well as contribute to the overall improvement of the choir. Music from many historical periods and styles will be studied. The Concert Choir will participate in regularly scheduled concerts. Students are strongly encouraged to enroll in 1.0 credit Concert Choir (731)

Prerequisite: Student ability to match pitch **BELLA VOCE** 

733 | GRADE 9-12

Credit: 1

In this course, students will learn the principles of good vocal technique, including diction, proper breathing, and tone production. There will be an emphasis on music literacy, including sight-singing skills. They will learn and perform challenging choral literature for the female voice. Acceptance into Bella Voce will be made after a successful audition in May of the previous year.



Student audition

## **JAZZ ENSEMBLE "ESQUIRES"** 732 | GRADE 9-12



This course is comprised of instrumentalists who desire to perform jazz, rock, blues, swing, pop and various other forms of contemporary popular music. Besides performing in a variety of styles, improvisational skills are developed; all members are encouraged to improvise. The Jazz Ensemble affords students the opportunity to perform at concerts, travel to festivals and learn of career opportunities for contemporary musicians. Entrance into "Esquires" is based upon an audition. "Esquires" is a graded, scheduled course in the instrumental music curriculum. Any student who wishes to be placed in Jazz Ensemble must first select 1.0 Symphonic band (749).



Student audition

# 734 | GRADE 9-12

Chorale is for the truly dedicated choral singer. Auditions are required and will be held in the spring of each school year. This group will perform in regularly scheduled concerts. Challenging choral literature from many historical periods and styles will be studied. Emphasis is placed on the development of individual and ensemble musicianship skills. Any student who wishes to be placed in Chorale must first select six-day concert choir. After a successful audition, the student will be placed into Chorale by the director.

Student audition

### **ORCHESTRA** 737/747 | GRADE 9-12

**737**:

747:

Credit:

The orchestra is comprised of students who play string instruments and desire to perform in an orchestra and improve their instrumental skills. Emphasis is placed on the development of individual instrumental technique as well as small ensemble practice and skills. The orchestra performs a variety of orchestral literature from many styles and periods. Students with no prior string instrument experience must receive permission from the director.

String players are strongly encouraged to enroll in 1.0 credit Orchestra (747)

## SYMPHONIC BAND 748/749 | GRADE 9-12

749:

Credit: 1

This course is designed for students who desire to continue their musical education or to start on a new musical instrument. Students will learn beginner to intermediate level technical and ensemble skills necessary for performance on a musical instrument. Music literacy and the ability to perform expressively on a musical instrument are the primary goals of this ensemble. Students will perform a wide variety of musical literature. Emphasis is placed on the development of ensemble skills and individual instrumental technique. Students are strongly encouraged to enroll in 1.0 credit Symphonic band (749).



# MUSIC DEPARTMENT (CONT'D.)

### MUSIC THEORY 1 744 | GRADE 9-12

Credit:

This course is offered to students who have been introduced to the elements of music in general music course work, but who desire to continue their study of music in a detailed, comprehensive program. The materials and structure of music are defined and analyzed; the content of the course challenges the student/musician to demonstrate musical literacy in their listening, and performance skills. Activities include sight singing, melodic and rhythmic dictation and harmonic analysis. This course is the prerequisite for Music Theory AP.

### PERCUSSION ENSEMBLE 751 | GRADE 9-12



The objective of this lab is to develop the student rhythmically and melodically by emphasizing the fundamentals of melodic and battery percussion. The students will study the history of percussion, both in the U.S. and abroad. Students will continue to hone their abilities on the following instruments: Marching Percussion, Concert Percussion, Drum Set and Auxiliary Percussion. The lab will perform at both the winter and spring instrumental concerts. Some after-school rehearsals may be required.

Į.

Percussion experience

# MUSIC THEORY, ADVANCED PLACEMENT 760 | GRADE 11-12



This course is designed to provide an intensified study of music. Music composition, listening skills and some music history will be included in this course. Students majoring in music, as well as students who have an interest in music study are encouraged to enroll. Although students who enroll in this course should have a strong interest in music, it is not necessary to have an instrumental or vocal background.



Prerequisite: Music Theory 1 or by petition

## SCIENCE DEPARTMENT



$$Ad = Bd = Bh - Ch$$

$$Ad =$$

The Emmaus High School Science Department, through a diversity of course offerings, provides students with the knowledge and skills base needed to meet the PA Academic Standards in the following areas: Unifying Themes of Science, Inquiry and Design, Biological Sciences, Physical Science, Chemistry, Physics, Science Technology and Human Endeavors, Earth Sciences, Environment and Ecology, Technology Education, and Technology Design.

To meet the PA Academic Standards, each student should successfully complete at least one course in Biological Sciences and one course in Physical Sciences before the senior year at Emmaus High School.

**SCIENCE PATHWAYS** 

#### 10th Grade Biology 9th Grade 9th Grade **Honors Biology** GSI 10th Grade Honors Biology 10th, 11th, and 12th Grade If interested in a STEM career, it would be beneficial to complete at least 4 credits of science. These credits should include at least one course from each of the categories below. If you are not interested in a STEM career, consider taking the courses that most interest you. **Earth & Environmental Biology Physical Science** Anatomy & Physiology, CP ■ Environmental Science Chemistry AP Chemistry ■ Botany & Zoology ■ AP Environmental Science ■ Microbiology/Genetics, Honors Geology of the National Parks ■ AP Physics 1 ■ AP Physics 2 AP Biology Astronomy ■ AP Physics C Advanced Astronomy Physics Oceanography Biomechanics Meteorology Environmental Sustainability\* \* May count as Science and/or Tech Ed credit Things to consider: Students must successfully complete 3.0 credits of science to graduate.

Science Pathways are a recommended guide for student program planning. They are not required pathways.

■ College bound students should familiarize themselves with admission requirements for individual colleges and choose

■ One credit of Biology is required

courses accordingly

■ Some courses have prerequisites that must be taken before enrolling



### **GLOBAL SCIENCE INQUIRY**

411 | GRADE 9 | NC44.

Credit:

Global Science Inquiry is a 9th grade science course. The course is taught in an inquiry manner utilizing both scientific and engineering practices to address integrated concepts of earth science, life science, and physical science. Students will use problem solving and critical thinking to evaluate data, create simulations, and analyze scientific writing regarding change, adaptation, and ecology. This is a college preparatory course aligned to the Next Generation Science Standards. (Fulfills STEM requirement for graduation)

## **BIOLOGICAL SCIENCES**

#### **BIOLOGY 1**

417 | GRADE 10-12 | **NC44**.



This class provides an introduction into the study of general biology, starting from basic scientific concepts to biochemistry, and the natural laws that govern life and all living things. The course aims to improve student understanding of living things, from the tiny and simple to the complexities of plants and animals, ending with a basic understanding of ecology and the study of population dynamics. Students will complete the Keystone Exam at the end of this course.



Prerequisite: Successful completion of Global Science Inquiry

# BIOLOGY 1, HONORS 453 | GRADE 9-12 | NC44.



The students' understanding and appreciation for the living world will be enhanced through the study of general biology, starting from basic scientific concepts to biochemistry, and the natural laws that govern life and all living things. During the course, students are expected to develop the skills of an independent and collaborative learner, critical thinker, conscientious researcher, and problem-solver. Students will complete the Keystone Exam at the end of this course. (Fulfills STEM requirement for graduation)



Prerequisite: 8th Grade Science teacher recommendation or recommended 90% or better in Global Science Inquiry

# BOTANY-ZOOLOGY 431 | GRADE 10-12 | NC44



Specialized biology 2 course intended for students who would want to further pursue an in-depth study of the evolutionary history of plant and animal life on Earth. The course focuses on the mechanisms that led to the adaptations, evolution, and diversity of life, primarily plants and animals. An extensive study of the evolution of bacteria, protists, invertebrate and vertebrate animals, mammals, primates including humans, plants including flowers, and insects is included in the course. Strong microscope skills will be required. Dissections of a vertebrate animal and a flower occur. Fast plants are grown and fruit flies are raised as well. The course requires a solid understanding of basic biological principles, evolution, and DNA studies. (Fulfills STEM requirement for graduation.)

Ţ

Prerequisite: Recommended 75% or better in Biology 1 or Biology 1, Honors

### HUMAN ANATOMY/PHYSIOLOGY 433 | GRADE 10-12 | NC44



Specialized biology 2 class intended for students who want to pursue a career in the health or medical fields. Course includes in-depth study of anatomical terminology, histology, and various body systems (skeletal, muscular, nervous, integumentary, etc) as well as homeostatic diseases, diagnostic techniques, and treatments. Extensive microscope skills will be required to explore cells and tissues of the human body. Students will use models and preserved specimens of organs and systems to further their studies and dissection of a sheep eye occurs. (Fulfills STEM requirement for graduation)

Ţ

Prerequisite: Recommended 75% or better in Biology 1

# GENETICS/MICROBIOLOGY, HONORS 457 | GRADE 11-12 | NC44.



Students apply biological concepts to gain in-depth knowledge of the foundations of microbiology and genetics. The microbiology portion emphasizes microbes that impact health and ecology. Students will explore viruses, bacteria, protists and fungi. Cellular metabolism, methods of bacterial control, and infectious diseases will also be studied. Laboratory work includes advanced microscope skills, bacterial staining, growth controls, and identification. The genetics portion explores Mendelian and Non-Mendelian principles of heredity. Students will research human pedigrees and genetic disorders and gel electrophoresis. Laboratory investigations include microscopic viewing of mitosis, fast plant and/or fruit fly genetic studies and statistical analysis, and biotechnology applications. (Fulfills STEM requirement for graduation)

!

Prerequisite: Recommended 75% or better in Biology 1, Chemistry 1, CP; and successful completion of Algebra 2 CP

# BIOLOGY, ADVANCED PLACEMENT 461 | GRADE 10-12 | NC44



AP Biology is an introductory college-level biology course designed to prepare students for the AP Biology Exam. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes, energy and communication, genetics, information transfer, ecology, and interactions. It is equivalent to a two-semester college introductory biology course for biology majors. 25 percent of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students



with opportunities to apply the science practices. Students should have successfully completed high school courses in biology and chemistry. This course includes a summer assignment. (Fulfills STEM requirement for graduation)



Prerequisites: Recommended 80% or better in Biology 1, Honors and Chemistry 1, Honors, or 90% or better in Biology 1 and Chemistry 1 CP

## **PHYSICAL SCIENCES**

# APPLIED CHEMISTRY 1 403 | GRADE 9-12 | NC44.



Chemistry is a physical science that is known as the central science because it is a foundation for many science and technological fields such as engineering, environmental sciences, forensics, medicine, nursing, and all health fields. Students will learn chemistry content in the context of real life topics. These topics may include the atomic structure and the concept of energy; common elements, compounds and mixtures; the periodic arrangement of elements and its use in predicting chemical behavior; chemical reactions; chemical formulas; chemical quantities: the kinetic molecular theory, gas laws and chemical bonding. (Fulfills STEM requirement for graduation)



Prerequisite: Successful completion of Fundamentals of Algebra or Algebra 1

# CHEMISTRY 1, COLLEGE PREPARATORY 421 | GRADE 9-12 | NC44



Chemistry is a physical science that is known as the central science because it is a foundation for many science and technological fields such as engineering, environmental sciences, forensics, medicine, nursing, and all health fields. The course focuses on the composition, structure, behavior, and properties of matter and with the changes matter undergoes during, and as a result of, chemical reactions. It involves study of substances in all of the states of matter (solid, liquid and gas) and knowledge and understanding of the various structures of matter (incl. e.g. atoms, molecules, crystals and other aggregates) whether in isolation or in combination with others. Inquiry-based laboratory experiments will be used to explore these topics.(Fulfills STEM requirement for graduation)



Prerequisite: Recommended 70% or better in Algebra 1

#### \* PROJECT- BASED CHEMISTRY 1, COLLEGE PREPARATORY



#### 421PB | GRADE 9-12

This course studies matter and energy through project-based learning and explanatory modeling. Through this course students will learn chemistry content in the context of real-life topics. Course content

aligns to Next Generation Science Standards and includes atomic structure, energy, periodic law, chemical reactions, stoichiometry, solutions, kinetic molecular theory, gas laws, chemical bonding and nuclear chemistry. (Fulfills STEM requirement for graduation)



Prerequisite: Recommended 70% or better in Algebra 1

# CHEMISTRY 1, HONORS 452 | GRADE 9-12 | NC44



Chemistry is a physical science that is known as the central science because it is a foundation for many science and technological fields such as engineering, environmental sciences, forensics, medicine, nursing, and all health fields. The course focuses on the composition, structure, behavior, and properties of matter and with the changes matter undergoes during, and as a result of, chemical reactions. It involves study of substances in all of the states of matter (solid, liquid and gas) and knowledge and understanding of the various structures of matter (incl. e.g. atoms, molecules, crystals and other aggregates) whether in isolation or in combination with others. Inquiry-based laboratory experiments will be used to explore these topics. Students are expected at the honors level to work more independently and cover a greater depth of understanding of the topics. (Fulfills STEM requirement for graduation)

Prerequisite: Recommended 90% or better in Algebra 1 or successful completion of Algebra 2

# CHEMISTRY, ADVANCED PLACEMENT 463 | GRADE 10-12 | NC44



This course is designed to be the equivalent of a first-year college chemistry course. It differs from the usual secondary course with respect to the amount of topics studied, the depth of study, the emphasis on calculations and the type and variety of laboratory work completed by the student. Laboratory work will include the use of sensitive balances, spectrophotometers, pH meters, and other analytical equipment. Unknown samples will be identified through analytical and qualitative chemistry. Each laboratory report will include a sophisticated analysis of the experiment. A summer assignment is required in this course. The course will prepare a student for the Advanced Placement Examination in Chemistry. (Fulfills STEM requirement for graduation)



**Math Prerequisite:** Recommended 90% or better in Algebra 2 CP OR 80% or better in Algebra 2 Honors

**Science Prerequisite:** 80% or better in Biology 1 Honors OR 80% or better in Chemistry 1 CP/Honors



# APPLIED PHYSICS 1 406 | GRADE 11-12 | NC44

Credit:

Students will learn to interpret physical observations. Course topics include linear and rotational motion, forces, torques, and waves. Real-world applications will be explored through mathematical and conceptual discussions. Hands-on experimentation and algebraic calculations will be throughout the course. Algebraic applications are prevalent throughout this course. (Fulfills STEM requirement for graduation)



Prerequisite: Recommended 75% or better in Algebra 2

# PHYSICS 1, COLLEGE PREPARATORY 425 | GRADE 10-12 | NC44



Students will learn to mathematically analyze forces, motion, momentum, work, and energy. This algebra-based introduction to physics will include fundamental explanations of motion, including graphs and algebraic analysis of real-world applications. (Fulfills STEM requirement for graduation)



Prerequisite: Recommended 80% or better in Algebra 2 CP AND concurrent enrollment in Geometry, CP

# WAVES AND OPTICS, COLLEGE PREPARATORY 427A | GRADE 10-12



This laboratory-based course will focus on new concepts which are not included in Physics 1 CP or Physics 1 AP. This course will cover waves and optics, topics included in AP Physics 2 but not to the scope and depth. This course is intended for the student who has an interest in physics and wants to learn more about the subject. Topics will include waves and optics. Students will NOT be prepared to take the AP Physics Exam at the end of the course. (Fulfills STEM requirement for graduation)



Prerequisite: Recommended 80% or better in Physics 1 CP OR recommended 70% or better in AP Physics 1 OR concurrent enrollment in AP Physics

# ELECTRICAL PHYSICS TOPICS, COLLEGE PREPARATORY



427B | GRADE 10-12 | NC44.

This laboratory-based course will focus on new concepts which are not included in Physics 1 CP or Physics 1 AP. This course will cover Electricity and other Physics topics which are included in AP Physics 2 but not to the scope and depth. This course is intended for the student who has an interest in physics and wants to learn more about the subject. Topics will include Electricity, Magnetism, and Other Physics Topics. Students will NOT be prepared to take the AP Physics Exam at the end of the course. (Fulfills STEM requirement for graduation)



Prerequisite: Recommended 80% or better in Physics 1 CP OR recommended 70% or better in AP Physics 1 OR concurrent enrollment in AP Physics

# PHYSICS 1, ADVANCED PLACEMENT 464 | GRADE 10-12 | NCAA

Credit:

Students will cultivate their understanding of physics through inquiry-based and data analysis investigations as they explore these topics: kinematics, dynamics, circular motion and gravitation, energy, momentum, simple harmonic motion, torque and rotational motion. Students will have opportunities to demonstrate the foundational physics principles and apply science practices. The student will be prepared to take the AP Physics 1: Algebra Based Exam. (Fulfills STEM requirement for graduation)



Prerequisite: Recommended 80% or better in Algebra 2, 80% or better in Geometry AND concurrent enrollment in Precalculus

# PHYSICS 2, ADVANCED PLACEMENT 470 | GRADE 10-12 | NC44

Credit:

Students will cultivate their understanding of physics through inquiry-based and data analysis investigations as they explore these topics: thermodynamics, electricity, magnetism, optics, and modern physics. Students will have opportunities to demonstrate the foundational physics principles and apply science practices. The student will be prepared to take the AP Physics 2: Algebra Based Exam. (Fulfills STEM requirement for graduation)



Prerequisite: Recommended 80% or better in Precalculus and AP Physics 1

# PHYSICS C, ADVANCED PLACEMENT 472 | GRADE 10-12 | NC44

Credit:

This course is for students who have a strong background in science and math. The topics are comparable to a first-year calculus based college physics course which includes mechanics and electricity/magnetism. This course will prepare the student for both Advanced Placement Level C Examinations (Mechanics and Electricity/Magnetism) in Physics. If successful at both exams, the student could earn 8 college credits. This course includes summer preparation in Calculus to be completed by the start of school in August. (Fulfills STEM requirement for graduation)



Prerequisite: Recommended 80% or better in Precalculus with a recommended 80% or better in AP Physics 1 AND concurrent enrollment in Calculus. If a student does not take AP Physics 1, it is recommended the student already had Calculus.

## INTRODUCTORY BIOMECHANICS

Credit:

419 | GRADE 11-12 | **NC44**.

Students will learn about forces and their effects on the body. This course will introduce concepts of position, velocity, and acceleration to mathematically describe aspects of motion. Students will apply concepts of Physics and Anatomy to analyze structures and forces used for movements. Students will engage in laboratory activities in



which there would be real motion analysis of common activities such as walking, and jumping. (Fulfills STEM requirement for graduation)

Į.

Prerequisite: 70% or better in CP Physics OR 70% or better in Anatomy/Physiology and 70% or better in Algebra 2

## **ENVIRONMENTAL SCIENCE**

# ENVIRONMENTAL SCIENCE 418 | GRADE 10-12 | NCAA



Ecological principles and sustainability will provide the basis for exploring numerous environmental issues. Human impacts on the quality of air, water, and land will be discussed with the goal of helping students understand possible solutions to create a sustainable future world environment. The use of energy resources will include discussions of conservation and alternative energy sources. The production of waste, and potential solutions to our ever-growing accumulation of waste will be explored. The impacts of world and local population growth on environmental quality will be integrated throughout the course. (Fulfills STEM requirement for graduation)

!

Prerequisite: Successful completion of Biology 1 or Biology 1, Honors

# ENVIRONMENTAL SUSTAINABILITY (ES), HONORS



954ST | GRADE 10-12 | NC44

Environmental Sustainability (ES), Honors is a high school level course that is appropriate for students who are interested in investigating and designing solutions in response to real-world challenges related to clean and abundant drinking water, food supply issues, and renewable energy. Students will research and design potential solutions to these true-to-life challenges facing the world today. Students will apply their knowledge through hands-on activities and simulations. This course can be used to satisfy one science graduation credit. (Fulfills STEM requirement for graduation)



Prerequisite: Recommended completion of Principles of Engineering (POE), or Introduction to Engineering Design (IED), OR recommended successful completion in Biology (1 or Honors), and interest in environmental/biological engineering

# ENVIRONMENTAL SCIENCE, ADVANCED PLACEMENT



468 | GRADE 11-12 | **NC44**.

The AP Environmental Science course is designed to engage students with the scientific principles, concepts, and methodologies required to understand the interrelationships within the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with

these problems, and examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography. (Fulfills STEM requirement for araduation)



Prerequisite: Successful completion of Biology 1 and successful completion or concurrent enrollment in Chemistry 1 CP

## **EARTH AND SPACE SCIENCE**

#### **ASTRONOMY**

Credit:

## 408A/408AD | GRADE 10-12 OR CONCURRENT ENROLLMENT IN HONORS BIOLOGY | NC44

Using an inquiry-based approach, students will gain an understanding of the basics of our solar system and the processes that shape it, including planets, constellations, moons, stars, telescopes, and galaxies. Students will get hands-on experiences using the planetarium and the observatory to gain an introduction to the night sky. (Fulfills STEM requirement for graduation)

**Note:** Students may be able to take this course for undergraduate college credits through West Chester University's Dual Credit by Exam program. See page 11 for more information.

# ADVANCED ASTRONOMY, COLLEGE PREPARATORY

Credit:

422/422D | GRADE 10-12 | **NC44**.

Students will apply concepts such as time, celestial motion, stellar evolution, and astrophysics, to gain a more in-depth understanding of the processes that shape our universe. This class will use the Planetarium and Observatory extensively throughout the course, incorporating multiple branches of science. (Fulfills STEM requirement for graduation)



Prerequisite: Recommended 75% or better in Algebra 2

**Note:** Students may be able to take this course for undergraduate college credits through West Chester University's Dual Credit by Exam program. See page 11 for more information.

#### **OCEANOGRAPHY**

Credit:

# 410A/410AD | GRADE 10-12 OR CONCURRENT ENROLLMENT IN HONORS BIOLOGY | NC44.

This course is a study of the physical, chemical and geological processes at work in the oceans and their effect on marine plants and animals. The history of oceanographic research, instrumentation, seafloor topography, seafloor spreading, the chemistry of seawater, waves, currents, tides and life in the sea are topics included in this course. (Fulfills STEM requirement for graduation)

**Note:** Students may be able to take this course for undergraduate college credits through West Chester University's Dual Credit by Exam program. See page 11 for more information.



#### **METEOROLOGY**



## 412B/412BD | GRADE 10-12 OR CONCURRENT ENROLLMENT IN HONORS BIOLOGY | NC44

This course is the study of the atmosphere. Included in this course will be a study of the Earth-Sun relations, atmosphere compositions, structure and circulation, elements and control of weather and air pollution. The use of meteorological instruments and the interpretation of weather maps will be an important part of this course. (Fulfills STEM requirement for graduation)

**Note:** Students may be able to take this course for undergraduate college credits through West Chester University's Dual Credit by Exam program. See page 11 for more information.

#### **GEOLOGY OF THE NATIONAL PARKS**

Credit:

## 414B/414BD | GRADE 10-12 OR CONCURRENT ENROLLMENT IN HONORS BIOLOGY | NC44

This course is focused on the national parks of the United States and presents various geological concepts through these incredible places. By focusing on the parks, students will be given tools to help them become critical observers and participants in the Earth Sciences. Emphasis is placed on understanding and interpreting landscapes and their origin. This course will illustrate how geologic phenomena (mountains, volcanoes, earthquakes, etc.) result from processes that occurs within or on the surface of the Earth. There is also an opportunity to learn how humans and animals have been affected by geology and the national parks, which will help in appreciating natural science. (Fulfills STEM requirement for graduation)

**Note:** Students may be able to take this course for undergraduate college credits through West Chester University's Dual Credit by Exam program. See page 11 for more information.

## SOCIAL STUDIES DEPARTMENT





The Emmaus High School Social Studies program is based on the Pennsylvania Academic Standards for History, Civics and Government, Economics, and Geography. History is the unifying discipline and includes designated strands of geography, civics, government relations, economics, political science, and contemporary issues. These strands provide students with the skills and knowledge necessary to make informed decisions. Skills include critical thinking and problem solving techniques, which lead to negotiation and resolution of social conflicts. Students should choose, with the help of parents, teachers, and school counselors, the program best suited to their abilities and future plans.

**Note:** All students are required to complete four credits of Social Studies. One of the credits also fulfills one of the two required credits in Arts/Humanities.

As students select courses to fulfill the four- credit requirement, they must complete all of the following:

- 1. American Studies (American Studies 1 and 2 OR U.S History, Advanced Placement)
- 2. World Studies (World Studies; European History, Advanced Placement; or World History, Advanced Placement)
- **3.** Government (Government/Economics, GP; Government, CP; U.S. Government, Advanced Placement; U.S. History, Advanced Placement; or Humanities)

# AMERICAN STUDIES 1 201 | GRADE 9 | NC44

Credit:

Through discussion, written response, and inquiry-based approaches students will explore the time period leading up to the Civil War through The Great Depression. The incorporation of many perspectives and voices are studied in their historical context. The cause and effect relationships of historical events will be emphasized throughout the course through the applications of historical principles and concepts, as well as primary source analysis. Connections to current events will be highlighted to examine continuity throughout history through writing, presentation and debate.

# AMERICAN STUDIES 1, HONORS 250 | GRADE 9 | NC44.



Through discussion, written response, and inquiry-based approaches students will explore the time period leading up to the Civil War through The Great Depression. The incorporation of many perspectives and voices are studied in their historical context. The cause and effect relationships of historical events will be emphasized throughout the course through the applications of historical principles and concepts, as well as primary source document analysis through writing, research, presentation and debate and highlight the methods used by historians to interpret the past.





#### **AMERICAN STUDIES 2**

211 | GRADE 10 | **NC44**.

Credit:

Through discussion, written response, and inquiry-based approaches students will explore the history, global interactions, and changing patterns in the culture and people of the United States from World War II to 2010. Cause and effect relationships of historical events will be emphasized, as well as the everyday application of historical principles to current events. A focus on the analysis and application of primary sources will be interwoven into the course.

İ

Prerequisite: Students must have successfully completed American Studies 1 (9th grade)

## **AMERICAN STUDIES 2, HONORS**

251 | GRADE 10 | **NC44**.

Credit:

Through discussion, written response, and inquiry-based approaches students will explore the history, global interactions, and changing patterns in the culture and people of the United States from World War II to 2010. Cause and effect relationships of historical events will be emphasized, as well as the everyday interpretation and application of historical principles and concepts. A focus on the research, analysis and interpretation of detailed primary sources as well as historical writing tasks will be interwoven into the course.

İ

Prerequisite: Students must have successfully completed American Studies 1 (9th grade)

#### **WORLD STUDIES, GENERAL PREPARATORY**

220 | GRADE 11 | **NC44**.

Credit:

Through discussion, written response, and inquiry-based approaches students will explore world history from the Italian Renaissance to the present. Students will examine major world events from Europe, Africa, Asia, and Latin America. Students will examine major periods of world history, such as the age of exploration, the French revolution, the Industrial revolution, and the independence movements of African and Latin American nations. Students will examine major social, political, and economic events in the world using current events to establish connections to the past through selected primary sources.

#### **WORLD STUDIES, COLLEGE PREPARATORY**

222 | GRADE 11 | **NC44** 

Credit:

Through discussion, written response, and inquiry-based approaches students will explore world history from the Italian Renaissance to the present. Students will examine major world events from Europe, Africa, Asia, and Latin America; such as the age of exploration, the French revolution, the Industrial revolution, and the independence movements of African and Latin American nations, establishing connections between different regions of the world and between the past and present. Students will analyze major social, political, and economic events in the world using current events to establish connections to the past through various primary sources.

### **WORLD STUDIES, HONORS**

252 | GRADE 11 | NC44

Credit:

Through discussion, written response, and inquiry-based approaches students will explore world history from the Italian Renaissance to the present. Students will examine major world events from Europe, Africa, Asia, and Latin America; such as the age of exploration, the French revolution, the Industrial revolution, and the independence movements of African and Latin American nations, establishing connections between different regions of the world and between the past and present. Students will analyze major social, political, and economic events in the world using current events to establish connections to the past through various primary sources, research and academic articles.

## **GOVERNMENT AND ECONOMICS, GENERAL PREPARATORY**

230 | GRADE 12 | NC44.

Credit:

This is a course designed to enable newly-emerging citizens to understand and participate in American society. For the government portion of the course, students analyze and discuss the function of government at the national, state and local levels, as well as the role of citizens in the political process. For the economics portion of the course, students explore basic economic theory and practical applications in everyday life including financial and economic literacy through real world examples. Current issues are interwoven into the curriculum to relate theory to practice.

# SOCIAL STUDIES DEPARTMENT (CONT'D.)



## GOVERNMENT, COLLEGE PREPARATORY

231/231D | GRADE 12 | NC44.

Credit: 0.5

Through discussion, debate, written-response and real world application, students will explore the basics of political theory and structure of the United States government and will assess the role of American citizenry in governmental structure. Major emphasis will be given to a study of the structure and operation of the U.S. government, a citizen's role in government, development and functions of political parties and civil liberties in society. Current issues will be interwoven into the curricular information to relate theory to practice.

#### **231**<sub>0</sub>

Students may take this course for undergraduate college credits through Lehigh Carbon Community College's Dual Credit Program.

# ECONOMICS, COLLEGE PREPARATORY 233 | GRADE 12 | NC44

Credit:

Students will analyze, discuss and apply basic knowledge of micro and macroeconomics. Major emphasis will be given to the economic way of thinking, market behavior, firm behavior in market economies, economic policy and consumer affairs. Students will utilize economic concepts to interpret policy actions. Current events will be interwoven into the curricular information to relate theory to practice.

#### **PSYCHOLOGY**

#### 236/236D | GRADE 12 | NC44.

Credit:

This is a course designed to introduce students to the basic concepts important to general psychology. Students will apply the experimental method to solve problems posed in class. Concepts such as history and systems of psychology, sensation and perception, memory, cognition, learning and common disorders will be introduced to students.

#### 236D

Students may take this course for undergraduate college credits through Lehigh Carbon Community College's Dual Credit Program.

#### SOCIOLOGY

Credit:

#### 238/238D | GRADE 12 | NC44.

This is an introductory course that examines our complex social environment with special emphasis on the problems of everyday group living. Students will gain a better knowledge of human relationships and an understanding of why we act the way we do in different situations; student interests are to be considered for more in-depth research of a particular social problem. This course is intended to give the student a broad understanding of culture and society, and addresses topics including race, gender, and sexuality.

#### 238D

Students may take this course for undergraduate college credits through Lehigh Carbon Community College's Dual Credit Program.

### **U.S. HISTORY, ADVANCED PLACEMENT**

#### 260 | GRADE 9-12 | **NC44**.

Credit:

The AP U.S. History course focuses on the development of historical thinking skills and an understanding of content learning objectives organized around seven themes, such as identity, peopling, and America in the world. In line with college and university U.S. history survey courses increased focus on early and recent American history and decreased emphasis on other areas, the AP U.S. History course expands on the history of the Americas from 1491 to 1607 and from 1980 to the present. It also allows teachers flexibility across nine different periods of U.S. history to teach topics of their choice in depth. Students will read, analyze and discuss selected documents and selections from the major 20th century historians. Students will pursue independent projects, both oral and written, with emphasis on writing and research. Students will review the major concepts of U.S. history and prepare for the Advanced Placement Examination in U.S. History.



# SOCIAL STUDIES DEPARTMENT (CONT'D.)

## AMERICAN GOVERNMENT AND POLITICS, ADVANCED PLACEMENT

Credit:

262 | GRADE 10-12 | **NC44**.

The Advanced Placement course in American Government and Politics is designed to give students a critical perspective on politics and government in the United States. This course involves both the study of general concepts used to interpret American politics and the analysis of specific case studies. It also requires familiarity with the various institutions, groups, beliefs, and ideas that make up the American political reality. Further, students will learn to engage specific information critically to evaluate general propositions about politics and government. Students also learn to present basic data relevant to government and politics in sustained written arguments. Students will prepare for the Advanced Placement Examination in U.S. Government and Politics.

# EUROPEAN HISTORY, ADVANCED PLACEMENT 264 | GRADE 10-12 | NC44

Credit:

The AP European History course focuses on cultural, economic, political, and social developments. These focus areas provide context for understanding the development of contemporary institutions, the role of continuity and change in present-day society and politics, and the evolution of current forms of artistic expression and intellectual discourse. Students will be expected to critically read, write, view and analyze European History from 1450 to present. Included in this course will be how the art, music, literary, economic, social and political aspects of the various periods interact and impact history. Students will pursue independent projects aimed at the critical analysis of historical writings. Students will prepare for the Advanced Placement Examination in European History.

## **WORLD HISTORY, ADVANCED PLACEMENT**

265 | GRADE 10-12 | **NC44**.

Credit:

World History, AP is a college-level non-western history (from 1200 C.E. to the present) course that relies on college-level texts, primary and secondary sources. This course is broken up into nine time periods with a focus on examining each time period through six themes interwoven throughout human history. Historical, political, social, economic, and religious developments will be covered through historical writing, essays, document based questions and objective evaluations and projects. Attention will be given to prepare students for the World History AP exam.

## **ECONOMICS, ADVANCED PLACEMENT**

266 | GRADE 10-12 | NC44.

Credit:

This course is intended for selected students with a strong mathematical background, or who have shown evidence of superior academic ability. The purpose of this course is to give students a thorough understanding of the principles of economics that apply to our economic system. The course places particular emphasis on the study of national and international economic studies. It also places familiarity with both macro and microeconomics in developing a student understanding of economic performance measures. Students will be expected to read, analyze, and discuss both the primary and supplemental sources in addition to independent projects involving problem-solving situations. Students will prepare for the Advanced Placement Examinations in both micro and macroeconomics.

### PSYCHOLOGY, ADVANCED PLACEMENT

268 | GRADE 10-12 | NC44

Credit:

This is a rigorous and demanding course requiring students to have a strong work ethic, to read at a rigorous pace, and to complete a variety of writing based assignments. Students are expected to demonstrate strong writing and analytical skills. Statistical analysis will be introduced as well. This year-long Advanced Placement Psychology course follows the APA guidelines and is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major sub-fields within psychology. Areas covered include but are not limited to: the history and systems of psychology; research methods; ethics; statistical analysis; sensation and perception; physical, social and emotional development; social psychology; and abnormal behavior and therapies. Upon completion of the course students may take the AP Psychology exam in May. This course requires a summer assignment.

İ

Prerequisite: Students are recommended to have a strong science background.

# SOCIAL STUDIES DEPARTMENT (CONT'D.)



#### **SENIOR HUMANITIES, HONORS**

950 | GRADE 12 | NC44.

**SOCIAL STUDIES:** 



**ENGLISH:** 



This course will examine human endeavors from the perspectives of philosophy, culture, history, and aesthetics. Focusing on the Western Tradition, the course will endeavor to connect the cultural traditions, philosophies, and values of the time period to the art and literary texts produced. Furthermore, the course proposes to illustrate how the Western Tradition informs our current culture. Using a mix of ancient, medieval, and modern texts in a variety of mediums. The exploration of the Western Tradition will require reading, informal and expository writing, analytical thinking and problem-solving skills, and visual and musical literacy. The course requires a team approach for many activities, encouraging students to develop communication and collaborative skills. Each student will be required to complete a research paper, emphasizing a scholarly approach in which students practice skills such as thesis writing, finding and evaluating secondary sources, and synthesizing primary and secondary source information. Word study will focus on appropriate terminology specific to the disciplines of art, music, literature, and history. The course includes summer assignments for all disciplines: art, music, literature, and history. This course runs everyday for the full school year.



Prerequisite: Admission by application

#### HISTORY STANDARDS

SSCR



In this course, students will learn/review recurring themes in history and practice social studies skills (map reading, analyzing primary sources, etc).



## SPECIAL EDUCATION DEPARTMENT

## PATHWAYS TO POSSIBILITIES

Secondary transition skills are of paramount importance in facilitating successful employment outcomes for individuals post high school graduation. These skills encompass a wide range of abilities, including communication, problem-solving, time management, and self-advocacy, which are essential for navigating the complexities of the job market and workplace. Equipping students with these skills not only enhances their employability but also fosters independence, self-confidence, and the ability to adapt to evolving career opportunities. Moreover, for individuals with disabilities, these skills are particularly crucial as they can bridge the gap between academic learning and real-world employment, ultimately promoting inclusivity and equal access to meaningful work opportunities. In sum, the cultivation of secondary transition skills is a cornerstone in empowering graduates to embark on fulfilling career paths and lead self-sufficient lives beyond their high school years.

### HORNET PERKS COFFEE SHOP GRADE 9-12+



Through an emphasis on career readiness preparation, soft and trade aligned skills are folded into the establishment and implementation of a fully functioning school based-coffee shop called the Hornet Perks. Students will have the opportunity to generalize core standards-based Math, Science, and English skills in functional ways that allow the demonstration of core-content skill acquisition as detailed in each students' individualized education plan. Students will also have opportunities to problem solve and engage in collaborative teambased activities that culminate in the successful implementation of a school-based coffee shop modeled after industry standards for implementation. Ongoing assessment of student skills, strengths, and interests will support future career exploration.

#### STUDY SKILLS GRADE 9-12+



Through an emphasis on individual student core content skill acquisition, the study skills class will detail individualized instructional opportunities that expand executive functioning capacity, curate productive study habits, and explore multiple preferred modalities for learning through an individualized approach.

# HORNET CAREER EXPLORATION PATHWAYS GRADE 9-12+



Through an emphasis on career readiness preparation and ongoing transition assessment, soft and vocational skills are folded into a variety of identified Emmaus High School Academic Department specific job simulated opportunities. Academic and Functional skill acquisition and generalization opportunities are provided as students explore career specific pathways detailed within each participating academic department. Technology, Art, Business, Athletics, Family and Consumer Science, and the Science Department provide vocational opportunities for students to explore. The career connections seminar component provides the platform for resume writing, interview preparation, financial literacy and reflection on pathway exploration. Skills, strengths, and interests are continually assessed providing critical information to IEP teams to support potential postsecondary outcomes.

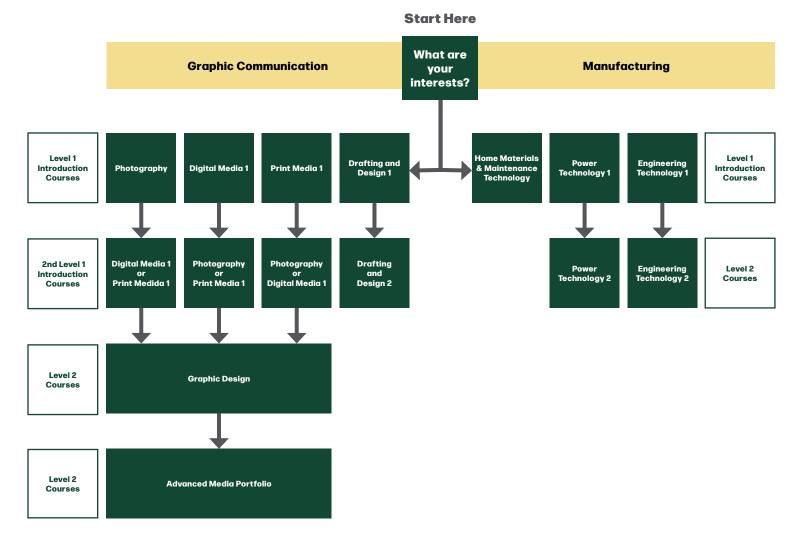
## TECHNOLOGY EDUCATION DEPARTMENT





Technology and Engineering are vital parts of our everyday lives. Everything from the construction of our homes to the most advanced computer systems on the planet rely on technological design processes to create the world around us. The Technology and Engineering Education Department at Emmaus High School provides students with a wide range of opportunities. The hands-on courses focus on project based learning experiences in the areas of photography, graphic communications, materials and processes, transportation, drafting and architecture. In addition to our Technology Education courses, we are also part of Project Lead the Way (PLTW). In this pathway, students gain an exposure to civil engineering, architecture, electronics, robotics and product development. Students learn about problem solving, leadership and teamwork in these exciting courses.

#### TECHNOLOGY EDUCATION PATHWAYS





# TECHNOLOGY EDUCATION DEPARTMENT (CONT'D.)

### DRAFTING AND DESIGN 1 900 | GRADE 9-12

Credit:

This is an introductory course giving the student a basic understanding of mechanical drawing and the introduction to CAD Drafting. Presented are: the use of drawing instruments, CAD drafting, and the theory of shape description as it applies to design. Emphasis will be placed on the importance of neatness and paying attention to detail. Process learning and problem solving are key points in this class. Drawings will be completed on the drawing board and in Google Sketch Up. (Fulfills STEM requirement for graduation)

### **DIGITAL MEDIA** 901 | GRADE 9-12

Credit:

This is an introductory course giving the student a basic understanding of the production of new media, the communication and display of information, and the development of interactive applications. The students will use critical and innovative thinking skills to produce meaningful and relevant digital media in the areas of photography, graphic design, video production and web design. Emphasis will be placed on the importance of illustration, design and layout, and creativity. Process learning and problem solving are key points in this class. (Fulfills STEM requirement for graduation)

### PRINT MEDIA 903 | GRADE 9-12



This is an introductory course that incorporates the process of designing, preparing and reproducing visual images such as words, photographs, artwork and symbols in printed format. The students will be exposed to numerous areas of printed media technology. They are: Layout, Design, Typography, Screen Printing, and Offset Lithography. Emphasis will be placed on the importance of neatness and paying attention to detail. Process learning and problem solving are key points of this course. (Fulfills STEM requirement for graduation)

## PHOTOGRAPHY 904 | GRADE 9-12

Credit:

Students will be exposed to digital photography and its technological impact in media today. Film concepts will be applied to the world of digital photography. Adobe Lightroom and Adobe Photoshop will make digital images come to life. Emphasis is placed on composition, lighting techniques and studio lighting. Students will develop an understanding and appreciation for digital photography's impact in today's ever changing digital society. (Fulfills STEM requirement for graduation)

### ENGINEERING TECHNOLOGY 1 906 | Grade 9-12

Credit: **0.5** 

This course is divided into two areas of study. The first area covers basic electricity and electronics. The topics covered will be electrical

theories and practices, electrical and electronic experiments, and the construction of electronic projects. The second area covers creative problem solving and experimentation. The topics may include kinetic energy projects, truss fabrication and analysis, robotics, flight, alternative energy, and a more in-depth study of electronics. The material is presented through lecture, demonstration, and hands-on activities. Careers and occupations in the various fields of technology are explored. (Fulfills STEM requirement for graduation)

## ENGINEERING TECHNOLOGY 2 907 | Grade 9-12

Credit:

In the first part of this course, students will learn how to operate a CNC lathe and milling machine. Emphasis will be placed on design, programming and running part programs. The second part of this course allows a greater exploration of engineering studied in Engineering Technology 1. Self-directed study involving electricity/ electronics, transportation systems, construction, manufacturing, and robotics and computer integration will be presented with a hands-on problem-solving approach. (Fulfills STEM requirement for graduation)

Į.

Prerequisite: Successful completion of Engineering Technology 1

### POWER TECHNOLOGY 1 908 | GRADE 9-12

Credit:

This course is divided into three basic areas of study. The first area is internal combustion engine theory and operation. A four cycle engine is disassembled; components and systems will be studied and evaluated, reassembled and test run. The second area covers self-directed study in the areas of mechanisms, simple machines, pneumatics, hydraulics, aerodynamics, and alternative forms of transportation. The third area covers the design, fabrication, racing, and evaluation of an electric powered dragster. The material is presented through lecture, demonstrations, and hands-on lab activities. Careers and occupations in related fields are explored. (Fulfills STEM requirement for graduation)

## POWER TECHNOLOGY 2 909 | GRADE 9-12

Credit:

This course is an extension of Power Technology 1. Self-directed areas of study may include applied pneumatics and hydraulics, alternative forms of energy and transportation, electric motor theory and gear train analysis which will be presented in a hands-on problem solving approach. The final project involves engineering teams designing, fabricating and testing electric-powered pulling tractor or hill climb vehicle. Related careers and occupations will be explored. (Fulfills STEM requirement for graduation)

ŀ

Successful completion of Power Technology 1

# TECHNOLOGY EDUCATION DEPARTMENT (CONT'D.)



## DRAFTING AND DESIGN 2 910 | Grade 10-12

Credit:

This course expands the skills of Drafting and Design 1, giving the student a basic understanding of orthographic projection, isometric development, machine drawing, and scale drawings. Process learning and problem solving are key points in this class. Students will have the opportunity to learn two dimensional design in AutoCAD and then progress to 3D design in OnShape. Students will not only design, but

Prerequisite:

Prerequisite: Successful completion of Drafting and Design 1

create products using laser engravers and 3D printers. (Fulfills STEM

## **GRAPHIC DESIGN** 912 | GRADE 10-12

requirement for graduation)



This course expands on the skills and techniques taught in Print Media and Digital Media. Emphasis is placed on the design process, digital design, screen printing, offset lithography and the production of online content. Experiences include layout and design, computerized layout composition, line and halftone photography, digital imagery, platemaking, vector graphics, and dye sublimation printing. (Fulfills STEM requirement for graduation)

İ

Prerequisite: Successful completion of one of the 3 Level 1 Graphic Communication Courses (Print Media 1, Photography, Digital Media 1)

### ADVANCED MEDIA PORTFOLIO 922 | Grade 11-12

Credit:

This course is designed to provide the experienced student in the Communication Track an opportunity to specialize in one area. Emphasis is placed on offset lithography, screen printing, and digital composition, prepress and post press production. From designing and printing materials for school organizations to full multimedia productions for local businesses and organizations, this course will focus on designer/client relationships, project management and media production. (Fulfills STEM requirement for graduation)

İ

Prerequisite: Successful completion of Graphic Design

## STAGE DESIGN 925 | GRADE 9-12

Credit:

The Stage Design course introduces students to a variety of "behind the scenes" activities as they learn to integrate set design, construction, painting, lighting, sound, special effects, and stage management for stage performances. Teamwork and collaboration will be emphasized in all aspects of technical theater, specifically with respect to set change choreography. Course content includes scale drawing and modeling, set construction techniques, scenic painting, sound and light board operation, and lighting design. Safety will be emphasized and practiced on stage and in the scene shop. The course offers optional extracurricular opportunities for students to participate in Emmaus High School's stage productions.

## HOME MAINTENANCE AND MATERIALS TECHNOLOGY

930 | GRADE 9-12

Credit:

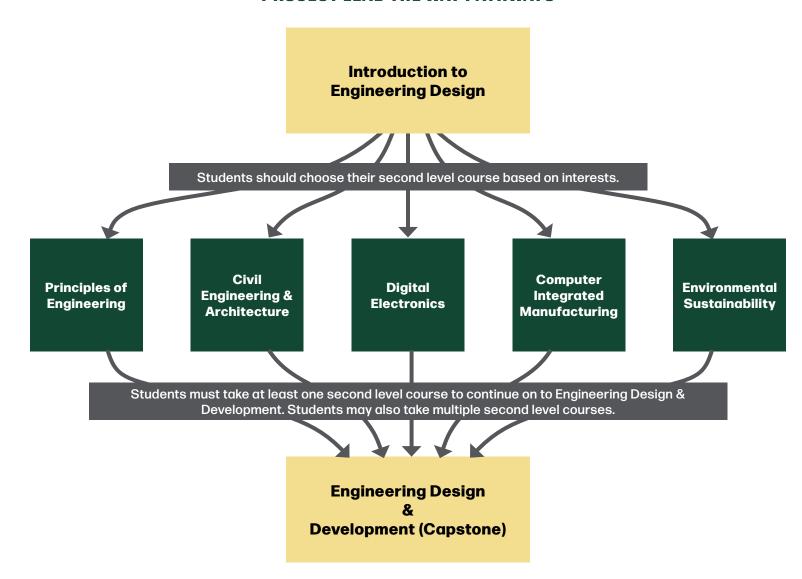
For many of our students, the investment of purchasing a home will be the largest financial investment they make and this course will help prepare our students to become better prepared to maintain and repair that investment. This course is a practical study of basic home maintenance repairs and renovations in electrical, plumbing, construction, and landscaping. Students will be learning how to use many different tools in an authentic, real-world situation. The tools will be introduced to the students as they are needed to perform the tasks in electrical, plumbing, construction, and landscaping. Safety is a major theme of this course and regardless of the topic, students will be learning how to safely use tools to perform the maintenance or repair. Students will be required to complete projects in this course that range from Do-It-Yourself videos to small fabrication projects. (Fulfills STEM requirement for graduation)



## PROJECT LEAD THE WAY (PLTW)

Project Lead the Way (PLTW) courses provide students with a rigorous and innovative Science, Technology, Engineering, and Mathematics (STEM) education curricular programs at the high school level. Developed by PLTW teachers, university educators, engineering professionals and school administrators, the program empowers students by placing student in the role of an engineer. The program's courses engage students in compelling, real-world challenges that help them become better collaborators, problem solvers, and critical thinkers. Students take from the courses indemand knowledge and skills they will use in high school and for the rest of their lives, on any career path they take. Students who complete PLTW coursework and the national end of course exam with high achievement could be eligible to receive college credits for a fee. Please see your school counselor for more information.

#### PROJECT LEAD THE WAY PATHWAYS



# PROJECT LEAD THE WAY (CONT'D.)



# INTRODUCTION TO ENGINEERING DESIGN (IED), HONORS 950ST | GRADE 9-12



Introduction to Engineering Design (IED), Honors is a high school level course that is appropriate for students who are interested in design and engineering. The major focus of the IED course is to expose students to the design process, research & analysis, teamwork, communication methods, global & human impacts, engineering standards and technical documentation. IED gives students the opportunity to design solutions to a variety of problems using 3D modeling software and use of an engineering notebook to document their work. (Fulfills STEM requirement for graduation)

İ

Successful completion of Algebra 1 Honors OR ≥ 70% in Algebra 1 OR concurrent enrollment in 306/314 Algebra 1/Algebra 2

# PRINCIPLES OF ENGINEERING (POE), HONORS 951ST | GRADE 10-12



Principles of Engineering (POE), Honors is a high school-level survey course of engineering. Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, robotics and automation. Students will develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation. (Fulfills STEM requirement for graduation)

Į.

Prerequisites: Completed or concurrently enrolled in Algebra 2 Honors OR completed Algebra 2 CP with 80% or better, Successful completion of Introduction to Engineering Design (IED)

### DIGITAL ELECTRONICS (DE), HONORS



952ST | GRADE 10-12



Digital Electronics (DE), Honors is a high school level course that is appropriate for students who are interested in utilizing applied logic in digital circuitry and devices. Students explore the foundations of computing by engaging in circuit design processes to create combinational logic and sequential logic (memory) as electrical engineers do in industry. This course requires the student to have a solid background in Algebra. Algebraic rules, laws and theorems will be used to manipulate and simplify logic expressions. Some topics include: Basic Electron Theory, Simple Circuits, Ohm's Law, Capacitance, Frequency, Number Systems, Gates, Combinational Circuit Design, Binary Addition, Flip-Flops, Shift Registers and Counters, Families and Specifications, and Microprocessors. (Fulfills STEM requirement for graduation) Prerequisite: Successful completion of Principles of Engineering (POE) or Introduction to Engineering Design (IED)



Prerequisite: Successful completion of Principles of Engineering (POE) or Introduction to Engineering Design (IED)

# CIVIL ENGINEERING AND ARCHITECTURE (CEA), HONORS 953ST | GRADE 10-12

Credit:

Civil Engineering and Architecture (CEA), Honors is a high school level course that is appropriate for students who are interested in learning the inter-relationship and mutual dependence of the civil engineering and architecture. Students learn important aspects of building and site design and development, and then they apply what they know to design a commercial building. By the end of the course, students will be able to present a comprehensive plan including three-dimensional renderings of buildings, building improvements, zoning and ordinance constraints, infrastructure requirements, and other essential project documentation. (Fulfills STEM requirement for graduation)

İ

Prerequisite: Successful completion of Introduction to Engineering Design (IED) OR completion of Drafting 1 and 2 with Drafting teacher's recommendation

## ENVIRONMENTAL SUSTAINABILITY (ES), HONORS

Credit:

954ST|GRADE 10-12| **NC44**.

Environmental Sustainability (ES), Honors is a high school level course that is appropriate for students who are interested in investigating and designing solutions in response to real-world challenges related to clean and abundant drinking water, food supply issues, and renewable energy. Students will research and design potential solutions to these true-to-life challenges facing the world today. Students will apply their knowledge



# PROJECT LEAD THE WAY (CONT'D.)

through hands-on activities and simulations. This course can be used to satisfy one science graduation credit. (Fulfills STEM requirement for graduation)



Prerequisite: Recommended completion of Principles of Engineering (POE), or Introduction to Engineering Design (IED), OR recommended successful completion in Biology (1 or Honors), and interest in environmental/biological engineering

# COMPUTER INTEGRATED MANUFACTURING (CIM), HONORS 955ST | GRADE 10-12



The purpose of this course is to teach the fundamentals of computerized manufacturing technology. It builds on the solid modeling skills developed in the introductory courses. Students use 3-D computer software to solve design problems. They assess their solutions through mass property analysis (the relationship of design, function and materials), modify their designs, and use prototyping equipment to produce 3-D models. The course includes the following concepts: Computer modeling with 3-D software for property analysis; Computer Numerical Control (CNC); Computer-Aided Manufacturing (CAM); Rapid Prototyping; Robotics; Flexible Manufacturing Systems; Programmable Logic Control; CIM Cell Construction. (Fulfills STEM requirement for graduation)



Prerequisite: Successful completion of Principles of Engineering (POE) or Introduction to Engineering Design (IED)

# ENGINEERING DESIGN AND DEVELOPMENT (EDD), HONORS 956ST | GRADE 12



Engineering Design and Development (EDD), Honors is the capstone course in the PLTW high school engineering program. It is an open-ended engineering research course in which students work in teams to design and develop an original solution to a well-defined and justified open-ended problem by applying an engineering design process. Students will perform research to select, define, and justify a problem. After carefully defining the design requirements and creating multiple solution approaches, teams of students select an approach, create, and test their solution prototype. Student teams will present and defend their original solution to an outside panel. While progressing through the engineering design process, students will work closely with experts and will continually hone their organizational, communication and interpersonal skills, their creative and problem solving abilities, and their understanding of the design process. Engineering Design and Development is a high school level course that is appropriate for 12th grade students. EDD should be taken as the final capstone PLTW course, since it requires application of the knowledge and skills introduced during the PLTW foundation courses and is appropriate for students who are interested in any technical career path. (Fulfills STEM requirement for graduation)



Prerequisite: Successful completion of Principles of Engineering (POE) or Introduction to Engineering Design (IED) and one or more additional PLTW courses

## WELLNESS/FITNESS DEPARTMENT





Wellness/Fitness is designed to expose students to a variety of physical activities throughout the course. With the exposure to activity options, students can establish exercise preferences and make independent choices based on personal enjoyment. This will hopefully translate into a continuation of being physically active throughout their lifetime. Course units include: lifetime fitness, mindfulness, racquet sports, team sports, and weight training.

The ultimate goals of this program are to maximum participation and enjoyment, and to gain an understanding of the value physical activity has on mental and physical health. Students must pass a minimum of 3 courses in wellness/fitness during years 9th, 11th and 12th grades. Aquatics will be in 10th grade.

### **PARTICIPATION**

The ultimate goals are maximum participation and enjoyment, and an understanding of the value of physical fitness in adult life.

Students are required to select one course in Wellness/Fitness each year. During the 9th, 10th, 11th and 12th grades, students must pass a minimum of 3 courses in wellness/fitness and 1 course of aquatics, as well as .50 credits in health in order to graduate.

Students must furnish their own athletic attire and/or swim suits, towels, bathing caps, nose clips, ear plugs, and goggles as necessary. Appropriate athletic attire consists of a shirt and shorts that are compliant with the EHS dress code. Appropriate bathing suits for females are a one piece or a tankini.

The safety of our students is foremost in our teachers' minds. Footwear must be sneakers that are athletic in nature with a closed front and back. Sneakers must be tied and laced as designed by the manufacturer. No platform/elevated soles will be permitted.

Showers after classes are available. Students taking aquatics are strongly encouraged to shower before and after entering the pool. All students are responsible for putting their equipment and valuables into their lockers and locking them. Each student will be issued a school combination lock. The replacement cost of a lost lock is \$10.00.



# WELLNESS/FITNESS DEPARTMENT (CONT'D.)

## **CO-ED COURSES**

CE1	CE2	CE4	CE5	CE6	CE7	CE8	CE9
9th Grade Wellness/ Fitness	10th Grade	10th Grade Aquatics, Adaptive	11th/12th Grade Wellness/ Fitness	Modified Wellness/ Fitness	Adaptive Wellness/ Fitness	11th/12th Grade Advanced Wellness/ Fitness	Lifeguarding

## AQUATICS CE2 | GRADE 10

Credit:

This course is required by all students for one marking period. The course consists of water survival, Red Cross Basic strokes, basic water safety, snorkeling and water games. Students enrolled in this course can be of all different swimming abilities.

# AQUATICS, ADAPTIVE CE4 | GRADE 10



This course is offered to those students with aquatic fears and limitations, and in need of an Individualized Educational Program (IEP). Students will be admitted to the program after screening by the staff and the student's IEP team.

## MODIFIED WELLNESS/FITNESS





This course is offered to those students with limitations and in need of an individualized physical education program. Students will be admitted to the program after a screening by the Wellness/Fitness staff and school counselor of appropriate documentation.

### **ADAPTIVE WELLNESS/FITNESS**

CE7



This course is for students who are disabled and currently have an Individualized Education Program (IEP) and may be eligible for this adaption. The IEP team would determine the appropriateness of this service.

### **HEALTH A**

HE9

# ADVANCED WELLNESS/FITNESS CE8

Credit:

This course provides an opportunity for qualified 11th and 12th grade students to participate in more comprehensive activity where individual interests and abilities can be developed in depth. Enrollment will be dependent upon the student's past achievements in wellness/fitness and a recommendation of the wellness/fitness staff.

## LIFEGUARDING CE9 | GRADE 10

Credit:

The primary purpose of the American Red Cross Lifeguarding course is to provide entry-level lifeguard participants with the knowledge and skills to prevent, recognize and respond to aquatic emergencies and to provide life-saving skills. At the conclusion of the course, students are eligible to take the American Red Cross Lifeguard test for a nominal fee (\$37.80 in 2023). If a student fails to pass the Red Cross test and obtain their lifeguard certification (due to earning unsatisfactory marks on the Red Cross scoring rubrics), they may still pass this EHS course and earn credit for completing the course work. This course can be used as the graduation required aquatics course.

Prerequisite: Students must be 15 years of age on or before the last scheduled session of the course, or they will be ineligible for obtaining their Red Cross Lifeguard certification.

If a student is not successful on the first attempt at the prerequisite skills (distance test), they only have one more opportunity to meet the prerequisites after sufficient rest, prior to the first scheduled class session.

If the student does not successfully perform any of the prerequisite skills, they are ineligible to participate in the class.

Credit:

This is the first half of a 2-part course that is provided to students during the 9th grade year. It is designed to provide students with the information and skills needed to make healthy lifestyle choices. The units covered in this course include Wellness, Substances and Communicable Diseases. Students will be actively engaged in various methods of learning in order to develop the skills necessary to exhibit and maintain positive behaviors. The goal of the course is for the students to apply what they have learned in order to make healthy lifestyle choices.

# WELLNESS/FITNESS DEPARTMENT (CONT'D.)



# HEALTH B

#### HE10

Credit:

This is the second half of a 2-part course that is provided to students during the 10th grade year. It is designed to provide students with the information and skills needed to make healthy lifestyle choices. The units covered in this course include First Aid/CPR/AED, Nutrition and Diseases. Students will be actively engaged in various methods of learning in order to develop the skills necessary to exhibit and maintain positive behaviors. The goal of the course is for the students to apply what they have learned in order to make healthy lifestyle choices.

#### **ADVANCED HEALTH**

Credit:

#### HE6

Advanced Health is an experience and discussion-based class that uses a variety of activities, project based learning, and authentic learning opportunities to discover the world of Health. Students interested in this course should be motivated to engage themselves in all discussions. Topics include but are not limited to: mental health, nutrition and nutritional choices of adults and the impact it has on health status, and examining issues relating to the use/non-use of drugs. Students will also have the opportunity to get certified in adult, child and infant First Aid and CPR. Guest speakers from a variety of health care fields, addiction recovery, and other life experiences may be incorporated into the course to provide authenticity. This course provides the opportunity for students to examine the health field with a deeper understanding. Students will have the opportunity to investigate a career they are interested in through an interview and possible shadowing experience.



Prerequisite: Successful completion of Health (HE9 and HE10)

Note: Advanced Health is an elective and does not meet student graduation requirement for health.



# **WORLD LANGUAGE DEPARTMENT**



The World Language Department strongly recommends that college-bound students study at least THREE, preferably FOUR, years of the same World Language. Students have the opportunity to complete five years of French, German or Spanish, and four years of Latin.

- 1. Students who receive an 80% or above in a level 1 World Language at the Middle School Level must move on to level 2 at the high school or choose a different level 1 World Language.
- **2.** Beginning with Level 2 World Language courses, and continuing through levels 3, 4, 4 Honors, 5, and AP, the majority of classroom interactions will occur in the target language.
- **3.** World language classes will resemble English classes in that they emphasize and focus on grammar, vocabulary, reading, writing, listening and speaking.
- **4.** While students are encouraged to take three or four years of the same language, the world language courses are electives; world language is NOT required for graduation.

### **AMFRICAN SIGN I ANGIJAGE**

#### **AMERICAN SIGN LANGUAGE 1**



In this introductory sign language course, students will learn to master an array of signs and confidently engage in conversations using phrases and full sentences. Silent instructional videos throughout the sign language training course provide an immersion in the Deaf experience to showcase proper sign techniques, highlight the importance of facial expressions, and develop fluency for meaningful conversations in this expressive language. Throughout this online sign language training course, students will learn to fingerspell the alphabet, sign colors, numbers, objects, and family members. Students will acquire a wide range of useful, everyday vocabulary that will enable you to engage in meaningful conversations with members of the Deaf community. Using video demonstrations, students will understand how to form correct signs and incorporate facial expressions to communicate in sign language.



This is an asynchronous online opportunity only via LCCC (Fall semester). It is taken outside the school day but does count towards EHS graduation requirements. It is available to juniors and seniors only.

## FRENCH

#### FRENCH 1

500 | **NC44**.

This course focuses on speaking and listening in a communication-oriented program. Students will acquire a solid linguistic foundation on which to build more advanced communication skills. Basic oral expression will be emphasized. By combining language and culture, students will strengthen their communication skills and expand their appreciation of French and Francophone cultures.

#### FRENCH 2

510 | **NC44**.



This course reinforces the French language through authentic speech patterns and maintains an emphasis on communication skills for everyday situations. The students continue to develop an appreciation of the arts and a cultural awareness of daily life in French-speaking countries. Students are expected to use French as much as possible in the classroom.

Ī

Prerequisite: Recommended 70% or better in French 1

# WORLD LANGUAGE DEPARTMENT (CONT'D.)



#### FRENCH 3

#### 520 | **NC44**

This course continues to reinforce the four skills of listening, speaking, reading, and writing. Students will build on the communicative foundation that was established in French 1 and 2, and will be expected to use the French language as much as possible in all classroom activities. French and Francophone culture will be integrated into most activities, and students will read several poems written by noted French



Prerequisite: Recommended 70% or better in French 2

#### FRENCH 4

#### 530 | NC44

and Francophone authors.

This course continues the study of grammar and vocabulary, providing ample opportunity for oral/aural practice and comprehension. In addition to the basic text, supplemental readings, and cultural/conversational texts will be used for reading comprehension and to encourage writing. Students will read short stories written by selected French authors, as well as magazine and newspaper articles. Compositions and oral reports are in French.



Prerequisite: Recommended 70% or better in French 3

## FRENCH 4, HONORS

#### 550 | **NC44**.

This course is an accelerated course designed to prepare the student for the Advanced Placement program. There will be required readings and writing assignments. French is the primary language in class. Students will make oral presentations and perform a variety of skits and/or plays. Authentic materials and novels will be used regularly. Summer assignments required.



Prerequisite: Recommended 80% or better in French 3

#### FRENCH 5

#### 540 | **NC44**.

This course will allow students to continue to improve their level of proficiency in the language by focusing on speaking, listening, reading and writing skills. Students will read short stories, poems and novels, will watch French films, and will listen to music in the target language. Vocabulary and grammar will be included in thematic units to encourage students to discuss and write about the course content. There will be an emphasis on several well-known French and Francophone authors.



Prerequisite: Recommended 70% or better in French 4 or French 4, Honors

# FRENCH, ADVANCED PLACEMENT (LANGUAGE) 560/560D | NC44

Credit:

This course is designed to achieve the highest possible degree of language proficiency. Students who take this course should already

Credit:

1

Credit:

1

Credit:

1

have a good command of grammar and considerable competency in listening, reading, writing and speaking. The course syllabus follows the standards set forth by the AP College Board, and reflects the three modes of communication- Interpretive, Interpersonal and Presentational- defined in the World Readiness Standards for Learning Languages, that are foundational to the course. Students will read and listen to authentic literary and informational texts, will write emails and essays, and will engage in both simulated conversations and presentational speaking. This course is taught entirely in French.



Prerequisite: Recommended 70% or better in French 4 or French 4, Honors

#### 56AI

Students may take this course for undergraduate college credits through Lehigh Carbon Community College's Dual Credit Program.

## GERMAI GERMAN 1

#### 502 | NC44

Credit:

Credit:

1

German 1 focuses on speaking and listening with a grammar-supported, communication-oriented program. All activities will primarily develop speaking and listening skills with secondary emphasis on reading and writing. Students will acquire a solid linguistic base on which to build communication skills, while they develop a knowledge and appreciation of the German speaking world.

# GERMAN 2

#### 512 | **NC44**.

German 2 reinforces and expands upon the four language skills of listening, speaking, reading, and writing. Students will build on the communicative foundation established in German 1. Students are expected to stay in the target language as much as possible. Students will begin reading and writing more at the German 2 level. German culture will be presented throughout every phase of language learning.



Prerequisite: Recommended 70% or better in German 1

#### **GERMAN 3**

#### 522 | NC44

Credit:

German 3 continues to reinforce and expand the four skills of listening, speaking, reading, and writing. Vocabulary and grammar topics increase in complexity throughout the year. The majority of instruction will be conducted in German, and students are expected to use German as much as possible. At the end of this course, students will decide whether to move on to German 4 or German 4, Honors.



Prerequisite: Recommended 70% or better in German 2



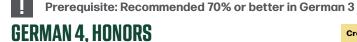
# **WORLD LANGUAGE DEPARTMENT**

#### **GERMAN 4**

532 | **NC44**.

Credit:

German 4 is designed for students who do not plan on taking the AP German exam. The level of vocabulary and grammar instruction continues to become more complex, but students have more time to master the concepts than they would in the German 4 Honors course. There is an increased concentration on cultural topics in the German 4 classroom. Instruction will be conducted almost entirely in German.



552 | NC44

Credit:

This course is an accelerated course designed to prepare the student for the Advanced Placement program. There is a strong focus on current topics in the German speaking world as we explore advanced grammar and vocabulary. German is used almost exclusively in the classroom.

Prerequisite: Recommended 80% or better in German 3

**GERMAN 5** 

542 | NC44.

Credit:

German 5 continues to work on the four language skills, with a strong emphasis on cultural topics, history, and literature. Some of the most advanced grammar and vocabulary topics are addressed, but they play a secondary role. This course is perfect for students who enjoy the language and culture, but who aren't looking for an intense exploration of grammar and vocabulary.

Prerequisite: Recommended 70% or better in German 4 or German 4, Honors

# GERMAN, ADVANCED PLACEMENT (LANGUAGE) 562/562D | NC44.



This course is designed to achieve the highest possible degree of proficiency. Students who take this course should already have a good command of grammar and considerable competency in listening, reading, speaking and writing. The course syllabus follows the standards set forth by the AP College Board, and reflects the three modes of communication- Interpretive, Interpersonal and Presentational- defined in the World Readiness Standards for Learning Languages, that are foundational to the course. Students will read and listen to authentic literary and informational texts, will write emails and essays, and will engage in both simulated conversations and presentational speaking. This course is taught entirely in German.

1

Prerequisite: Recommended 80% or better in German 4, Honors

#### 562D

Students may take this course for undergraduate college credits through Lehigh Carbon Community College's Dual Credit Program

# LATIN

#### LATIN 1

#### 506 | **NC44**.



This course develops the student's ability to read and comprehend Latin through the systematic mastery of grammar and syntax. By emphasizing the relationship between the original Latin roots and English, the course gives students a better understanding and appreciation of their own language. The course covers history, religion, and literature of Rome to enhance the students' awareness of the contributions of the Romans.

## LATIN 2 516 | **NC44**.

Credit:

This course continues and reinforces the principles of grammar and syntax as well as vocabulary introduced in the first year of Latin.

Students read narrative accounts of a typical Roman family, gaining insights into Roman culture and customs. The same methodology is employed in mastering their relationship with the English vocabulary. Students gain additional expertise by translating sentences from English to Latin, and by learning appropriate and common Latin phrases, inscriptions, and mottoes.

İ

Prerequisite: Recommended 70% or better in Latin 1

#### LATIN 3

#### 526 | NC44.

Credit:

This course focuses upon advanced grammar, vocabulary and syntax, culminating with the reading of ancient authors. Students will use the linguistic foundations already established in the earlier levels to translate and analyze demanding passages of poetry and prose. Special emphasis will be placed on the relationship between the literature and the political and social events of Roman life.

. ...

Prerequisite: Recommended 70% or better in Latin 2

#### LATIN 4

#### 536 | **NC44**.



Latin 4 uses authentic Roman literature as a vehicle for learning new grammar concepts. In addition to language acquisition, students will make connections between literature and the sociopolitical climate of Rome's golden age which will foster an appreciation for ancient Mediterranean cultures and their influences on a global scale. The focus of this course is to not only translate but interpret the works of ancient Romans as they apply to both the ancient and modern world.

1

Prerequisite: Recommended 70% or better in Latin 3

# WORLD LANGUAGE DEPARTMENT (CONT'D.)



## **SPANSIH** -

#### **SPANISH 1**

504 | **NC44** 

Credit:

This course focuses on communication through reading, writing, listening and speaking of the target language. Basic oral expression will be emphasized and students will produce meaningful and comprehensible language. There will also be a focus on Hispanic culture.

#### SPANISH 1 FOR NATIVE AND HERITAGE SPEAKERS

514N



This course is designed for students who are being raised in homes where Spanish is spoken. While they may have never received any formal instruction in their heritage language, they have attained some level of oral proficiency and internalized some basic grammatical concepts. This course will expand upon the skills the heritage speakers already possess, as well as focus on challenging reading and writing assignments which will allow the students to explore their own cultures more fully. Admission to this course is flexible and can include LEP/ESL students as well as those enrolled in English GP or English/Reading. Eligible students should understand at least 80% of spoken Spanish.

#### **SPANISH 2**

514 | **NC44**.

Credit:

Students in Spanish 2 will continue to build on the communicative foundation established in Spanish 1, and will produce meaningful and comprehensible (target) language. Students are expected to use Spanish as much as possible in the classroom. Current information on Hispanic culture will be presented throughout every phase of language learning.

Ţ

Prerequisite: Recommended 70% or better in Spanish 1

#### SPANISH 2 FOR NATIVE AND HERITAGE SPEAKERS

**524N** 



This course will continue to expand the skills learned in level one. More emphasis will be given to writing, listening and reading skills in Spanish, but expanding speaking skills beyond those learned in level 1 will be of great importance. Students will be challenged to think and express themselves in Spanish using the grammar and vocabulary learned through the use of the following instructional resources and activities: short films, movies, essays, readings, etc. Furthermore, students will explore topics that are relevant to the 21st century. Topics such as science and science fiction, TV and media, globalization and immigration will be discussed in Spanish. Spanish culture will also be an integral part of the course, allowing students to not only understand their own cultures, but also to examine the many cultural issues that affect the Spanish speaking world. Students who successfully complete this course will be eligible to take Spanish, Advanced Placement.



Prerequisite: Recommended 70% of better in Spanish 1 for Native and Heritage Speakers

#### **SPANISH 3**

524 | **NC44**.



This course continues to reinforce and expand the four skills of listening, speaking, reading and writing. Students will produce meaningful and comprehensible written and spoken (target) language. Students will be expected to use Spanish as much as possible in all classroom situations. Spanish culture will be integrated into all activities.

Ī

Prerequisite: Recommended 70% or better in Spanish 2

#### **SPANISH 4**

534 | **NC44**.

This course emphasizes listening, reading, writing and speaking skills in Spanish. Students will give presentations and write compositions and other assignments in Spanish. Students will read and listen to a variety of textbook-related and authentic sources.

Į.

Prerequisite: Recommended 70% or better in Spanish 3



# WORLD LANGUAGE DEPARTMENT (CONT'D.)

#### **SPANISH 4, HONORS**

554 | **NC44**.



This course is an accelerated course designed to prepare the student for the Advanced Placement program. In addition to the material completed in the textbook, there will be required readings and frequent writing assignments. Students will make presentations and will read articles and listen to audio from a variety of sources. All classes will work towards the goal of communicating exclusively in Spanish in the classroom.



Prerequisite: Recommended 80% or better in Spanish 3

#### **SPANISH 5**

544 | NC44



This course will continue the development of proficiency in speaking, listening, reading, and writing the Spanish language. Emphasis will center on the exclusive use of the language in the classroom. Students will present original dialogues using relevant vocabulary, and they will write original compositions and personal journals. Also, students will read and discuss excerpts from informational readings and Spanish literature, incorporating the historical and geographical concepts for these genres.



Prerequisite: Recommended 70% or better in Spanish 4 or Spanish 4, Honors

### SPANISH, ADVANCED PLACEMENT (LANGUAGE)

564/564D | **NC44**.



This course is designed to achieve the highest degree of language proficiency for students who choose to develop their abilities in Spanish for active communication, without special emphasis on literature. Students who enroll should have already attained a high degree of proficiency in listening comprehension, speaking, reading and writing. This course stresses oral skills, composition and grammar, and has the following objectives: the ability to comprehend formal and informal spoken Spanish; the acquisition of vocabulary, and a grasp of structure to allow the easy, accurate reading of relevant, current texts, as well as modern Hispanic literature; the ability to compose expository passages; the ability to express orally with accuracy and fluency. This course prepares the students for the Advanced Placement Examination.

#### 564D

Students may take this course for undergraduate college credits through Lehigh Carbon Community College's Dual Credit Program.



# LEHIGH CAREER & TECHNICAL INSTITUTE



Career and technical education, or CTE, helps students get more out of high school. Specifically, more opportunities to master practical skills, secure industry credentials, earn college credit, win scholarships, explore careers, develop leadership ability and gain real-world experience. That's why Lehigh Career & Technical Institute is the smart choice for students who want to be college and career ready when they graduate.

Operating with the support of all nine Lehigh County school districts, LCTI offers dozens of CTE programs taught by industry experts in five areas of study: Arts & Humanities, Business & Communication Technology, Engineering & Advanced Manufacturing, Health & Human Services and Industrial Technology.

We are the largest career and technical school in Pennsylvania and, thanks to the support of our education and industry partners, among the best equipped nationwide. LCTI's campus is adjacent to Lehigh Carbon Community College in the Schnecksville section of North Whitehall Township and boasts a 450,000-square-foot facility outfitted with the latest software, tools and equipment

## **ENROLLMENT OPTIONS**

**Academic Center:** The Academic Center provides students in grades 9-12 with the option of taking both their academic and career & technical course work at LCTI as full-day students. These rigorous academic courses will satisfy graduation requirements as well as complement the career & technical major of each student. Students will still graduate from their resident school districts and are encouraged to participate in extracurricular activities back at their sending school. Students will be able to register for the full-day program during their school district's regular course registration time.

**Half-day enrollment:** Students in grades 9-12 may choose the half-day enrollment option. The half-day option provides students with career & technical education at LCTI and the required academics at their respective school districts. Students are encouraged to take high-level coursework at the sending district which will provide the academic background necessary to be successful in today's highly technical careers.

Flex time enrollment: Another option that may suit students' individual needs is the flex-day program. The flex program is designed to provide students with technical coursework on a limited schedule. Students may choose to come to LCTI for one or more periods per day depending upon their needs. Students may attend one or both semesters and may attend for multiple years. Many students use this technical educational training as a jump start to a technical degree in a four-year institution. Both the half-day and flex-day options may be chosen during the regular course registration process.

### **ACADEMIC CENTER COURSE OFFERINGS**

All courses in the LCTI Academic Center are college-preparatory and meet graduation requirements. Courses are assigned based on classes completed at the sending district prior to attending LCTI. All science courses are lab-based and a graduation project is required for all Academic Center students. The courses offered in the Academic Center are listed below.

ENGLISH	MATHEMATICS	SCIENCE	SOCIAL STUDIES	OTHER
ELA I	Algebra I	Principles of Scientific Inquiry	American Studies I	
ELA II	Geometry	Biology	American Studies II	Wellness/ Fitness 11
ELA III Accelerated ELA III	Algebra II	Chemistry	World Cultures	Wellness & Fitness 12
ELA IV Accelerated ELA IV	Pre-Calculus	Physics I Physics II	American Government/ Civics/Economics  Accelerated American Government/Civics/ Economics	
LCCC English Course	Calculus	Environmental Science		
	LCCC Academic Courses			

## **LCTI ACADEMIC CENTER COURSE SAMPLE SCHEDULE 2023-2024**

GRADE 9		GRADE 10		
SEMESTER I	SEMESTER II	SEMESTER I	SEMESTER II	
Math		Math		
Scie	ence	Science		
EL	AI	ELA II		
American Studies I		American Studies II		
GRADE 11		GRADE 12		
SEMESTER I	SEMESTER II	SEMESTER I	SEMESTER II	
Math		ELA IV		
Mo	nth	ELA	\ IV	
Scie		ELA American Governmen		
	ence		nt/Civics/Economics	

<sup>\*</sup>Semester Course

#### LCTI ACADEMIC OPTIONS FOR HALF-DAY STUDENTS

Lehigh Career & Technical Institute (LCTI) provides academic courses to some half-day students who attend the school. It is very important for students to be successful in both their academic and technical course work. The courses taken at LCTI are necessary to meet the student's graduation requirements. If a student does not complete an academic course with a passing grade, the course must be retaken. LCTI does not offer a summer school; however, this option may be available through the sending high school. It may also be possible for courses to be made up during the students' senior year; however, make up courses scheduled in the senior year can cause the student to lose the opportunity for a Cooperative Education job placement. If the coursework is not made up, graduation from high school may be jeopardized.

The following academic courses for half-day students may be required while attending LCTI.

#### **AMERICAN STUDIES II:**

The American Studies II course addresses the development of the United States throughout the twentieth century. This course is aligned to the Pennsylvania Core Standards for Social Studies as well as Reading, Writing, and Listening and Speaking. Through various activities and lessons, these standards will be met to understand the development of the United States as a world power; focusing on economic and industrial development, political trends, society and cultural problems and achievements. The students will develop an understanding of the progress of technology and social groups. They will be expected to evaluate the changes of culture in society and analyze the political contributions of individuals and events of the periods studied. American Studies assignments also include the integrated concepts between this history course and various Career & Technical Labs. Students will be assessed formally and informally to determine mastery of the content for the duration of the academic year.

#### **WELLNESS & FITNESS:**

Course Overview: The Wellness Program provides students with life-changing information on nutrition and various techniques on stress management that they can use throughout life. The most common mental disorders will be researched and students will receive training on suicide prevention. During nutrition, students will investigate the harmful ingredients found in the foods they eat on a daily basis, analyze products served by several fast food chains and research healthy alternatives.

The Fitness Program is designed to acquaint students with the benefits of physical activity in their lives and to promote life-long wellness and fitness. The course, which is held in the state-of-the-art LCTI Fitness Center, will feature various strength and conditioning principles, such as specificity, progression and overload, along with multiple training techniques, such as CrossFit, Tabata, Yoga, and an assortment of technology-based exercises.





# LCTI CAREER & TECHNICAL EDUCATION OPTIONS

At Lehigh Career & Technical Institute, students learn by doing. Teachers guide students from instruction to action, helping them tackle projects that mirror on-the-job challenges as they develop the knowledge and skill necessary to secure industry credentials, earn college credit or both. For example, marketing students manage a store on their way to earning National Retail Federation certification. Programs are identified as either Program of Study (POS) or Career & Technical which designates the type of postsecondary credit options available. Students who participate in the POS programs have the ability to earn advanced college credits through SOAR (Students Occupationally and Academically Ready) or through articulation credit with a specific post-secondary school. Career & Technical programs only offer articulation credit where available.

LCTI's programs fall into five areas of study:

# **ARTS AND HUMANITIES**

#### ADVERTISING DESIGN/COMMERCIAL ART:

Students will learn the latest Adobe graphic design software currently used in the professional workplace. The emphasis of the program is based on Adobe Photoshop, Illustrator and InDesign and creating a printed and electronic portfolio of work produced through these programs. Students are able to receive certification for Adobe Photoshop, Illustrator and InDesign through Adobe endorsed Certiport. In addition to the Adobe Creative Cloud, students will learn traditional illustration skills such as pencil drawing and shading, water color, color pencil, scratch board and various other mediums. Photography for advertising is used in class and students will learn the use of a Digital Single Lens Reflex camera and the setup of strobe lights. Students are able to concentrate in three different career objectives which are Graphic Design, Sign-Making or Illustration. (POS)

#### **EMERGING DIGITAL MEDIA & SOCIAL COMMUNICATIONS:**

Social media is big business and video content is king. In our Emerging Digital Media program, students learn about the creative and technical processes that drive video production for multimedia platforms ranging from Snapchat and TikTok to YouTube and Netflix. They also explore deejaying and electronic dance music production as they master a variety of concepts, software and skills. (POS)

# BUSINESS AND COMMUNICATION TECHNOLOGY

### **COMPUTER INFORMATION TECHNOLOGY:**

Students will be at the forefront of cyber-security related issues as a means to safeguard sensitive data and preserve confidentiality. CIT challenges students to develop meaningful business solutions through computer programming in Visual Basic, C+, C#, and Java. Students learn to use data in order to produce information that moves organizations forward and solves problems.\*This program participates in the IT Academy\* (POS)

#### **COMPUTER & NETWORKING TECHNOLOGY:**

Students are prepared for advanced network training and the industry standard CompTIA A+ and Network+ Service Technician certifications. The program takes students from basic PC hardware through operating systems and networking. Students will also learn the MS Office Suite, customer service and support, and advanced network support. Students have the opportunity to participate in dual enrollment coursework for college credit; additionally, satisfactory completion of the program may grant college course credit through articulation agreements with LCCC. \*This program participates in the IT Academy\* (POS)

#### MARKETING & ENTREPRENEURSHIP:

Students learn about finance, retail marketing, banking, entrepreneurship, promotions and other important aspects of marketing through virtual business software and retail experience in the school's store. They examine what is necessary to run a business, promote a product or manage a department. Practical experience is available through the student-managed school store and by participating in community internship opportunities. (POS)

#### PRINT TECHNOLOGY/GRAPHIC IMAGING:

Students creatively design printed materials such as full-color books, posters, packaging, displays, stationary, as well as specialty items like mugs and shirts. Using the most current versions of Adobe Creative Cloud software on Apple Macintosh computers, students then reproduce their attractive projects on state-of-the-art copiers, printing presses, and bindery machines in a real production environment. (POS)

#### **WEB DESIGN/WEB PROGRAMMING:**

Students learn the fundamentals related to web page design and website development, graphics, multi-media and HTML coding. Students are taught the tools for rapid web page production and basic server-side programming techniques to handle everything from forms transmittal to building dynamic interactive web pages, intranet, extranet and e-commerce applications..\*This program participates in the IT Academy\* (POS)

# ENGINEERING & ADVANCED MANUFACTURING

#### **AUTOMATED INDUSTRIAL TECHNOLOGIES:**

Students learn an innovative curriculum which combines hands-on training with real world industrial equipment and software. Students get a solid background in industrial, electrical and electronic systems, A.C. and D.C. motors, motor controls, power distribution systems, programmable controllers, hydraulics, pneumatics, mechanical drives, transformers, process control systems and troubleshooting. (POS)

#### **ELECTRONICS TECHNOLOGY:**

Students are taught the principles of electronics. From DC Circuits to Semi-Conductive Devices they learn to design, build, and test electronic circuits. LCTI has a fully functioning Class 1000 fabrication room (cleanroom) where students create the silicon chips that are the foundation of the information age and the heart and soul of modern electronics. (POS)

#### **ENGINEERING DRAFTING & DESIGN:**

Students utilize computer-aided drafting and design software to create accurate representations of solutions to engineering design challenges. They hone their skills by designing and then producing three-dimensional models for machine parts, home additions, bridges and more. In the process, students learn to use 3D and wide-format printers, as well as common model-building materials. (POS)

#### PRECISION MACHINE TOOL TECHNOLOGY:

LCTI's Precision Machine lab is recognized as a Haas Technical Education Center and incorporates lessons and demonstrations, as well as extensive applications training in reading blueprints, operating a digital lathe, milling machine, drill press and other machine shop operations in the curriculum. Students train on state-of-the-art CNC machine tools placed in the lab by Haas Automation. (POS)

#### PRE-ENGINEERING & ENGINEERING TECHNOLOGY:

This pre-engineering program is a sequence of courses which, when combined with traditional mathematics and science courses, introduces students to the world of engineering. Students study the principles of engineering, engineering design, digital electronics and computer integrated manufacturing. (POS)

#### SUPPLY CHAIN MANAGEMENT & LOGISTICS TECHNOLOGY:

Students learn inventory control, purchasing, receiving, shipping, equipment operation and maintenance in a state-of-the-art 17,000 square foot distribution center. Students train with current industry technology including handle-held track pads and computers, vertical and horizontal carousels, a computer-controlled conveyor and a computer-integrated warehouse management system. Students explore the supply chain of products from their global origin to the consumer including modes of transportation. (POS)

#### **WELDING TECHNOLOGY:**

This course teaches students shielded metal arc welding, gas metal arc welding, flux cord arc welding, welding inspection, testing, and safety/emergency procedures. The program operates under entry level certification authorization by the American Welding Society and a special arrangement with Lehigh Carbon Community College permits students to earn a national skills certificate and an Associate Degree. (POS)

# **HEALTH AND HUMAN SERVICES**

#### **ANIMAL SCIENCES:**

Animal Sciences: Students help groom, train, and provide medical treatment for dogs and cats. They care for gerbils, guinea pigs, rabbits, and other classroom animals. Students also visit farms, veterinary clinics, and zoos as they explore animal-centric careers. Animal Sciences is now available for students in grades nine and up. A dual-enrollment option is available exclusively for 12th-graders, who must apply to the program during their junior year and meet Lehigh Carbon Community College academic prerequisites, among other standards. Successful dual-enrollment program participants earn seven readily transferable college credits, plus American Red Cross and CareerSafe certifications for which other students are eligible. (POS).

#### **COMMERCIAL BAKING:**

Cake decorating, breads, rolls, sweet goods, pastries, pies, doughnuts and nutrition are all part of this course. Students learn the fundamental principles and procedures of operating a fully functioning bakery and retail bake shop, including preparation, display and management. With attention to both theory and practice, this course is designed to prepare students for entry-level positions in the commercial baking industry. LCTI's program is certified by the American Culinary Federation and is nationally recognized as exemplary in all areas of the curriculum. (POS)

#### COSMETOLOGY:

Students learn hair styling, hair cutting, hair coloring, chemical texturizing, nail/skin care and salon business operations. Students learn these skills through clinical practices offered at the school salon. Preparation for the Pennsylvania State Board Examination will enable students to become licensed as a cosmetologist and will allow them to work in a challenging and creative profession. (CAREER & TECHNICAL)

#### **CRIMINAL JUSTICE:**

Students learn Pennsylvania criminal and traffic laws, the legal use of force, search/seizure/evidence procedures, arrests and other aspects of law enforcement. Students also train in a fire arms simulator and conduct mock disaster drills to gain practical emergency skills. The program includes opportunities to earn Emergency Medical Responder (EMR) and Emergency Medical Technician (EMT) certifications. (POS)

#### **CULINARY ARTS:**

Stocks, soups, sauces, appetizers, desserts, main dishes, menu planning and nutrition are just some of the aspects of this program. Students learn front of the house and back of the house skills working in the school restaurant. LCTI's program is certified by the American Culinary Federation and is nationally recognized as exemplary in all areas of the curriculum. (POS)

#### **DENTAL TECHNOLOGY:**

Students who enroll in this program learn a variety of skills that will enable them to become a dental assistant, dental laboratory technician, and/or pursue a career as a dental hygienist. The major areas of study in the course include: dental radiology, oral pathology, chair-side dental assisting, anatomy and physiology, dental materials, sterilization, and dental office business procedures. (POS)

#### **EARLY CHILDHOOD EDUCATION:**

Students who enroll in this program prepare for careers as caretakers and teachers for young children. As students move through the program curriculum, they will: deliver quality child care that meets youngsters' physical needs and supports their development; collaborate with peers to create safe, engaging play environments for young children; lead fun, educational activities for preschool kids in an on-site child care center. (POS)

#### **EMERGENCY HEALTH SERVICES:**

Students who enroll in this program prepare for careers as first responders and more. As students move through the program curriculum, they will: master CPR and other first-aid while earning emergency medical services certifications; train with an ambulance simulator, medical manikins and other high-tech equipment; collaborate with other future first responders and health care providers during simulated emergencies. (POS)

#### **EMERGING HEALTH PROFESSIONALS:**

The Emerging Health Professionals Program provides high school seniors with an opportunity to experience a variety of health care careers in a hospital setting and take Penn State/Lehigh Carbon Community College science courses for college credit. Students spend one day a week rotating among various departments of a hospital. Students will experience these departments throughout the three Lehigh Valley Hospital & Health Network facilities, St Luke's University Health Network Allentown Campus, Country Meadows, and Good Shepherd Rehabilitation Network. The hospital portion of the program provides students with observational experience that enables students to observe various health care professionals as they work with patients. Also, students have the opportunity to meet various health career professionals during presentations within the LVHN community. In addition to these experiences, students are given an overview of the health care industry and all that it entails throughout their coursework at LCTI. This program is only available to senior students. (POS)

#### **FUTURE EDUCATORS:**

This dual-enrollment program is designed for 12th graders who aspire to be educators. It gives students a head start on college while exposing them to a variety of education careers. Students job shadow or train with teachers at LCTI and other Lehigh County schools. They also earn seven credits by taking Foundations in Education, Introduction to Special Education and Careers in Education courses at Lehigh Carbon Community College. This program is only available to senior students. (POS)

#### **HEALTH & MEDICAL SCIENCES:**

Health care is among the nation's fastest growing industries and offers a broad range of professional opportunities. In our Health & Medical Sciences program, students learn about the practical applications of medical science as they explore careers in physical therapy, athletic training and comparable fields. Students can earn CPR, AED and other certifications through the American Heart Association and may pursue internship and co-op positions at local health care facilities. (CAREER & TECHNICAL)

#### **TEACHER EDUCATION:**

Students studying childcare will learn child and staff health, child development, early childhood education, elementary education, special education, discipline and guidance of children, childcare program development and professional development. (POS)

#### **VETERINARY TECHNOLOGY:**

Students who enroll in this program prepare for careers in animal care and veterinary medicine. As students move through the program curriculum, they will: care for gerbils, guinea pigs, and rabbits while studying animal anatomy; assist with veterinary procedures and grooming for staff members' dogs and cats; examine animals for behavior and symptoms that could indicate illness or injury. (POS)

# INDUSTRIAL TECHNOLOGY

#### **AUTO COLLISION REPAIR TECHNOLOGY:**

Students learn about the tools and equipment associated with the collision repair industry, while learning welding, non-structural and structural damage analysis, estimating, and repair techniques, along with paint preparation and refinishing systems used on todays' technologically advanced automobiles. This comprehensive course of study and the volume of exposure students receive allows them to step into the workforce immediately following graduation or continue studies at the post-secondary level. (POS)

#### **AUTO TECHNOLOGY:**

Students in this program are prepared to diagnose and repair automobile systems including electrical systems, ignition and emission systems, engine cooling and lubrication, front ends, air conditioning, brakes, transmissions, engines and drive trains. Students participate in the nationally recognized Automotive Youth Education Systems (AYES) industry partnership. The program teachers are Master Certified ASE Technicians who utilize state-of-the-art equipment to prepare students to become automotive technicians. (POS)

#### **CABINETMAKING & MILLWORK:**

Cabinetry, wood products design and layout and construction open the world of cabinetmaking & millwork to students. Students are taught to read blueprints, make shop drawings, and produce components with trade-related hand and power tools and machinery. The newly expanded lab and curriculum provides knowledge of lumber products adhesives, fastener, finishing, 32mm cabinets and counter top fabrication. Technology has entered this rewarding construction trade with the addition of CNC router technology. (POS)

#### **CARPENTRY:**

Blueprints, site work, construction footings, framing floors/walls/ceilings/roofs, radon control, insulation and power tools are some of the areas taught in Carpentry. Students participate in the LCTI Student House Project where a home is built and sold at auction upon its completion. Students learn how the building industry works, its standards, and what is required to complete a project on time and at cost. (POS)

#### DIESEL MEDIUM & HEAVY TRUCK TECHNOLOGY:

Students gain experience with drive trains, clutch assemblies, transmissions, diagnostics, steering and other aspects of this industry. Students also study suspension, diesel engines, gasoline engines, bearings and seals. The trucking industry needs professionals to service the truck fleet that keeps industry and commerce moving in the United States. LCTI can provide students with the necessary expertise they need to succeed in this industry. (POS)

#### **ELECTRICAL TECHNOLOGY:**

Students learn residential, commercial, and industrial electrical wiring, as well as fluid power technology planning and wiring. Students are taught to install duplex and split wired duplex receptacles, single pole switches, 3-way and 4-way switches and Ground Fault Circuit Interrupters. (POS)

#### HEATING/AIR CONDITIONING & REFRIGERATION:

Students learn to install, troubleshoot and repair air conditioning, heat pumps, commercial refrigeration units and gas and oil heating equipment. Skilled technicians are proficient in reading electrical diagrams, diagnosis of electrical problems, air distribution designs, copper and steel pipe cutting, soldering and fabricating fiberglass and sheet metal duct systems. (POS)

# HEAVY EQUIPMENT OPERATIONS & PREVENTIVE MAINTENANCE.

As a student in this fast-paced and diverse program, you will learn the safety, maintenance and operating techniques for a wide variety of earthmoving equipment. Students will also receive instruction in soils, erosion and sediment control, site preparation, aggregate production, concrete and asphalt paving, surveys and grades, and utility installation. In addition, students will have the opportunity to learn machine systems, parts identification and ordering, and preventative maintenance techniques in a state-of-the-art facility. This program is not available to ninth grade students. (CAREER & TECHNICAL)

#### MASONRY.

Students will learn various layouts and pattern designs using brick, concrete masonry units, stone and ceramic tile. This comprehensive program teaches students how to correctly use the necessary tools and equipment to build simple wall structures, fireplaces and brick sculptures. Ceramic tile installation and thin stone veneer applications are also included in the curriculum. Students also participate in the student-built house project. (POS)

#### **PAINTING & DESIGN:**

Students learn to refresh and highlight interior and exterior spaces (residential and commercial) as well as improve and restore historical buildings. Painting, wallpaper hanging, furniture refinishing, line striping, staining and spraying are among some of the topics emphasized in this program.(CAREER & TECHNICAL)

#### **PLUMBING & HEATING:**

In this high priority occupation program, Students will learn the basic to the advanced skills of Plumbing & Pipe Fitting. Repairing and installation of items such as, but not limited to; Faucets, Bathtubs, Toilets, Sump Pumps, Sewage Pumps, Water Heaters, Boilers, Water Softeners, Well Pumps, Solar Heating Systems, Chilled Water, Air Conditioning and Radiant Heating Systems. This lab will teach skills such as but not limited to; brazing, soldering, threading, pressed, rolled/grooved, flared, pipe fitting and measurement and fused joints. Students will work with PEX, Copper, Steel, Cast Iron, PP-R, PVC and CVPC Pipe and Tubing. This program incorporates a multi-level and fast paced, technology enriched learning environment. (POS)

#### SMALL ENGINES/RECREATIONAL VEHICLE REPAIR:

Students will learn to diagnose and repair lawn mowers, chain saws, jet skies, motorcycles and go-karts. Students will learn about the small engine and the vital components to effectively make the engine perform to maximum efficiency. Students will also learn about brake systems, transmissions, hydraulics, hydrostatics and drive systems. Students will learn skills that involve welding, cutting with a torch, cylinder honing and boring. (POS)

# OTHER PROGRAM OPTIONS

#### **SERVICE OCCUPATIONS CLUSTER:**

Five curricular areas are offered in this program: Auto Specialization Technology, Building Trades Maintenance, Food Services, Indoor/Outdoor Maintenance, and Supply Chain Management & Logistics Technology. Each area is designed to help the student transition from basic entry-level skill development to more advanced technical training or directly into the workforce. A skills screening will be done to determine the readiness and interest of the student. Results of the screening will be provided to the student's IEP team.

#### **CAREER ACADEMY PROGRAM:**

Provides the nine participating school districts of Lehigh County an alternative for at-risk students to receive a high school diploma and work toward a career goal in their program of choice. Selected technical programs at LCTI are available to Career Academy Program (CAP) students. They receive academic instruction in English, mathematics, social studies, science, health/wellness, physical education, job readiness, and enrichment coursework. The program operates on a three-day rotation schedule with two out of three days focused on Career & Technical Education Programs. Programs include: Applied Horticulture, Building Trades Maintenance, Electrical Technology, Graphic Communications and Office Systems Technology.

#### SCHOOL-TO-CAREER

#### **JOB SHADOW**

Students accompany employees through part of a typical day and learn about the varied aspects of their job and skills required to work in the field.

#### INTERNSHIP

Students may participate in a business match program that allows them to spend a period of time working in their field of study.

#### **COOPERATIVE EDUCATION**

Students in 11th and 12th grade may participate in a business match program that allows them to spend a portion of the school year working in their field of study. Students pursue their academic coursework on a half-day schedule and report to their place of employment for the remainder of the day.





Did you know you can take college classes while attending LCTI?

## OPPORTUNITIES TO EARN COLLEGE CREDIT WHILE STILL IN HIGH SCHOOL

You won't have to break the bank to attend college. Each credit course at Lehigh Carbon Community College (LCCC) costs about half the regular tuition rate and less than a fourth of the cost for a comparable credit course at any one of Pennsylvania's State universities.

#### WHAT IS A PLACEMENT TEST?

A placement test is given to students who are interested in taking college courses at LCCC. Students must obtain a minimum score to be eligible for college classes. More information regarding placement testing can be found on lccc.edu.

#### **DUAL ENROLLMENT REQUIREMENTS?**

Students must be Level II or higher in their lab programs and maintain a minimum of a "B" average to participate in Dual Enrollment. Students must also have good attendance and no discipline referrals. The tuition and associated costs for dual enrollment courses must be paid by the student/parent.

## WANT TO SEE IF DUAL ENROLLMENT IS RIGHT FOR YOU?

Our free, one credit course "The College Experience" is an opportunity to explore dual enrollment. In "The College Experience" you'll learn what to expect if you go to college, as well as what will be expected of you. Upon completion of the course, students have the option of taking a placement test to determine eligibility for future classes at a reduced rate paid by the student/parent.

Lehigh Career & Technical Institute has a policy not to discriminate on the basis of race, color, national origin, sex, disability, or age in its programs or activities and provides equal access to the Boy Scouts and other designated youth groups. Inquiries may be directed to LCTI's Title IX and Section 504 Coordinator for students at 4500 Education Park Drive, Schnecksville PA, 18078 or 610-799-1357 (title9@lcti.org) or LCTI's Compliance Officer for personnel at 610-799-1385 (title9@lcti.org).

NUTES:	



W W W . E A S T P E N N S D . O R G / E H S

