## Ottawa High School

> Course Guide $2024-2025$


The mission of Ottawa High School is to build relationships with students while educating through rigor and relevance, resulting in life-long learners.

## TABLE OF CONTENTS

TABLE OF CONTENTS 2
Introduction 4
Disclaimer 4
Schedule Changes 4
Graduation Requirements (24 Credits) For 2025, 2026, 2027 4
Graduation Requirements (24 Credits) Beginning with the Class of 2028 5
Graduating with Honors 6
College Classes / C3 Initiative 6
Qualified Admissions 7
NCAA/NAIA Eligibility 7
Kansas Board of Regents 8
Required Courses 9
Language Arts 9
Mathematics 11
Science 13
Social Studies 15
Physical Education 17
Fine Arts 19
Art-2D 19
Art-3D 20
Music - Vocal 21
Music - Instrumental 23
Foreign Language 25
Theater 26
Film 27
Other Fine Arts 28
Practical Arts/Career Pathways 30
Comprehensive Agriculture Science Pathway 30
Power, Structural \& Technology Systems Pathway 31
Construction and Design Pathway (Construction Strand) 32
Construction and Design Pathway (Design Strand) 32
Digital Media Pathway 34
Graphic Design Pathway 37
Teaching/Training Pathway 38
Business Management and Entrepreneurship Pathway 39
Energy Pathway 41
Engineering and Applied Mathematics Pathway 42
Business Finance Pathway 43
Health Science Pathway 45
Restaurant and Event Management Pathway (Event Planning Strand) 47
Restaurant and Event Management Pathway (Culinary Arts Strand) 47
Early Childhood Development and Services Pathway ..... 49
Family and Community Services Pathway ..... 50
Information Support \& Services Pathway ..... 52
Web and Digital Communications Pathway ..... 53
Emergency and Fire Management Services Pathway ..... 54
Corrections, Security, Law and Law Enforcement Services Pathway-Law Enforcement Strand ..... 55
Manufacturing Pathway ..... 56
Marketing Pathway ..... 57
Aviation Maintenance Pathway ..... 59
Other Practical Arts ..... 60
Miscellaneous Electives ..... 62

## Introduction

Ottawa High School works hard to focus on career selection and preparation. This career focus starts in the $9^{\text {th }}$ grade when students and their parents are encouraged to select a course of study from one of the 16 career clusters. Ideally once a student selects a cluster, enrollment and course selection of electives can be made with that cluster in mind. More information about career clusters and descriptions can be found at https://xello.world/en/middle-and-high-school. Students can $\log$ in with their Chromebooks under the USD290 bookmark. Teachers work with students to create plans of study that will be updated and reviewed during the student's high school career..

## Disclaimer

Not all courses listed in this book will be offered during the 2023-2024 school year. However, through the enrollment process, it is our hope to offer the courses with the most student interest. This could mean that a course your student requested on an enrollment sheet may not meet the minimum enrollment numbers as determined by the administration. In this case, we will look to the alternative courses listed and find the next best fit. It is important that alternative courses are selected with the same care and thought that primary requests are selected, since some programs may change.

## Schedule Changes

Students may only change classes during the first three days of a semester. Any changes requested after that time must be approved by the building principal. If your student has an IEP, the IEP coordinator/teacher needs to approve the change before the schedule will be altered.

## Graduation Requirements (24 Credits) For 2025, 2026, 2027

Students must earn 24 credits, meet all requirements, and be in good standing to be eligible to participate in graduation exercises.

| Course area | Unit requirements (1 credit = 1 year) |
| :--- | :--- |
| Language Arts | 4 credits |
| Mathematics | 3 credits |
| Science | 3 credits |
| Social Science | 3 credits |
| Physical Education | 1 credit |
| Fine Arts | 1 credit |
| Practical Arts | 1 credit |
| Electives | 8 credits |

## Graduation Requirements (24 Credits) Beginning with the Class of 2028

Students must earn 24 credits, meet all requirements, and be in good standing to be eligible to participate in graduation exercises.

| Course Area | Unit requirements (1 credit = 1 year) |
| :--- | :--- |
| Language Arts | 4 credits, including .5 credit in communications |
| Mathematics | 3 credits |
| Science | 3 credits |
| Social Science | 3 credits |
| Physical Education | .5 credit |
| Health | .5 credit |
| Fine Arts | 1 credit |
| STEM Elective | 1 credit |
| Financial Literacy | .5 credit |
| Electives | 7.5 credits, with Individual Plan of Study/CTE Pathway emphasis |

## 2 or More Post Secondary Assets:

- Two or more high school athletics/activities
- $90 \%$ attendance in high school
- 40 or more Community Service Hours
- ACT Composite (Score of 21 or higher)
- WorkKeys Level (Silver or higher)
- 9+ College Hours
- State Assessment scores or 3 or 4 in Math, ELA, or Science (demonstrating College Readiness)
- 4-H Kansas Key Award
- Eagle Scout or Gold Scout
- Completing Board of Regents Curriculum
- Client-centered Projects
- Industry Recognized Certifications
- CTE Scholar
- Youth Apprenticeships
- Workplace learning experience directly related to a student's IPS
- Seal of Biliteracy
- ASVAB per requirements of military branch selected
- SAT score (1200 or higher)
- Senior Exit Interview/Senior Projects


## Graduating with Honors

Graduation honors are just for OHS graduation and do not equate to scholarships or scholarship money.

## Honors:

- The student must have completed all OHS course requirements for graduation with a grade point average of 3.5 or above.


## Cum Laude:

- The student must have completed all OHS course requirements for graduation and have a grade point average of 3.2 or above.
- CTE Pathway Completer OR completed the following courses:

| Course area | Unit requirements |
| :--- | :--- |
| English | 4 units |
| Mathematics | 3 units |
| Science | 3 units, including at least two lab courses |
| Foreign language | 1 unit |

## Magna Cum Laude:

- The student must have completed all OHS course requirements for graduation and have a grade point average of 3.5 or above.
- CTE Pathway Completer OR completed the following courses:

| Course area | Unit requirements |
| :--- | :--- |
| Honors English | 4 units |
| Mathematics | 3 units, including Precalc |
| Science | 3 units, including 1 credit of either Chemistry, Physics, Chemistry II, or College |
|  | Biology/Lab |
| Foreign language | 2 units, not required to be the same language |

## Summa Cum Laude:

- The student must have completed all OHS course requirements for graduation and have a grade point average of 3.8 or above.
- CTE Pathway Completer OR completed the following courses:

| Course area | Unit requirements |
| :--- | :--- |
| Honors English | 4 units |
| Mathematics | 3 units, including 1 credit of dual credit math (either College Algebra and |
|  | College Stats or NCCC Calculus) |
| Science | 3 units,including 1 credit of either Chemistry, Physics, Chemistry II, or College |
|  | Biology/Lab <br> Foreign language |

## College Classes / C3 Initiative

All college classes taught on OHS campus for dual credit are offered by NCCC. Due to the C3 Initiative students pay $\$ 20$ per college credit hour. NCCC decides grades, prerequisites, and all other issues relating to their courses. Students wishing to enroll in a course must first apply for admission to NCCC, take the Accuplacer test at NCCC, qualify through NCCC's Multiple Measures, or have a qualifying ACT score. Enrollment for high school credit is through the high school counseling office. Enrollment for college credit is through the Ottawa NCCC campus. The
 availability of courses offered on the OHS campus is dependent on OHS faculty meeting NCCC's accrediting body's (Higher Learning Commission) credentialing. Students also have the option of taking courses at Ottawa University for dual credit. Only seniors are allowed to leave Ottawa High School to take courses at a college campus with the exception of the HVAC, Nurse Aide and Medication Aide programs through the NCCC consortium.
(continued on next page)

If a student wants to withdraw from a concurrent class, the student with approval from administration and completion of paperwork can withdraw only from the college credit of the class. The student will remain in the high school credit side of the class until the end of the semester. No refund for the class will be made.

For students who have Individualized Education Plans or 504 plans, please click on the following link to note the process and how to access accommodation for NCCC classes. NCCC Disabilities/Accommodations.

## Qualified Admissions

What are Qualified Admissions? Qualified Admissions (QA) are a set of standards used by the six state universities to review applicants for undergraduate admission. The universities that use QA are Emporia State University, Fort Hays State University, Kansas State University, Pittsburg State University, University of Kansas, and Wichita State University. These standards are set by the Kansas Board of Regents, the governing body for the state universities.

Freshman applicants, aged 21 \& younger, who graduate from an accredited high school, will be guaranteed admission to the six state universities by meeting the Qualified Admissions requirements designated by each university, as follows:

## Emporia, Fort Hays, Pittsburg, Wichita

- Cumulative High School GPA 2.25+ OR ACT 21+ (SAT 1060)
- Cumulative GPA 2.0+ for college credits earned in high school
- Recommended: Kansas Scholars Curriculum*


## Kansas State University

- Cumulative High School GPA 3.25+ OR ACT 21+ (SAT 1060)
- Cumulative GPA 2.0+ for college credits earned in high school
- Recommended: Kansas Scholars Curriculum*


## University of Kansas

- Cumulative High School GPA 3.25+ OR Cumulative GPA 2.0+ and ACT 21+ (SAT 1060)
- Cumulative GPA 2.0+ for college credits earned in high school
- Recommended: Kansas Scholars Curriculum*
*Kansas Scholars Curriculum (click the link for eligible courses)
- English (4 credits)
- Math (4 credits)
- Social Science (3 credits)
- Science (3 units)
- Foreign Language (2 credits)


## All Institutions Require:

- Cumulative GPA 2.0+ for College Credits earned in High School


## NCAA/NAIA Eligibility

If you are interested in NCAA eligibility for student athletes, please be sure to check the NCAA Eligibility Center for registering a student. NAIA and other eligibility questions are best answered by the compliance officers at the college where the student-athlete plans to attend. All eligible classes at OHS are noted with a $\checkmark$ in the charts.

## Kansas Board of Regents

Completion of the Kansas Scholars Curriculum is one of the requirements Kansas residents must meet in order to receive State Scholar designation. This occurs during the senior year of high school.

## What are the other requirements to become a State Scholar?

- Students must have taken the ACT between April of the sophomore year and December of the senior year.
- Students must be a Kansas resident.
- Students must have their curriculum and 7th semester GPA certified on the official roster by the high school counselor, registrar, or similar official.


## Kansas Scholars Curriculum

Please note, this curriculum is NOT the same as the Qualified Admissions Curriculum.
English - 4 years
One unit to be taken each year. Must include substantial recurrent practice in writing extensive and structured papers, extensive reading of significant literature, and significant experience in speaking and listening.
Mathematics - 4 years
Algebra I, Algebra II, Geometry, and one unit of advanced mathematics-- suggested courses include:
Analytic Geometry, Trigonometry, Advanced Algebra, Probability and Statistics, Functions or Calculus.
Completion of Algebra I in 8th grade is acceptable for the Kansas Scholars Curriculum.
Science-3 years
One year each in Biology, Chemistry, and Physics, each of which include an average of one laboratory period a week. Applied/technical courses may not substitute for a unit of natural science credit.
Social Studies - 3 years
One unit of U.S. History; minimum of one-half unit of U.S. Government and minimum of one-half unit selected from: World History, World Geography or International Relations; and one unit selected from: Psychology, Economics, U.S. Government, U.S. History, Current Social Issues, Sociology, Anthropology, and Race and Ethnic Group Relations. Half unit courses may be combined to make this a whole unit.

## Foreign Language - 2 years

Two years of one language. Latin and Sign Language are accepted.

## What is the benefit of completing the Kansas Scholars Curriculum?

Students that complete this curriculum and meet the other requirements, may be designated as State Scholars, which makes one eligible to receive the Kansas State Scholarship as provided by the Kansas Legislature. The academic profile of recent scholars include an average ACT of 30 and an average GPA of 3.91. State Scholars may receive up to $\$ 1,000$ annually for up to four undergraduate years (five, if enrolled in a designated five-year program), based on financial need and the availability of State funds. Financial need is measured by federal methodology using data submitted on the FAFSA.

For more information, contact us at 785-430-4300 or at kansasregents.org/students/student financial aid.

## Required Courses

| Language Arts |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course | Course <br> Number | Grade | Credit | NCAA | Prerequisites |
| English 9 | EN110 | 9 | 1 | $\checkmark$ |  |
| Honors English 9 | EN150 | 9 | 1 | $\checkmark$ | C or better in English 8 or teacher approval |
| English 10 | EN210 | 10 | 1 | $\checkmark$ |  |
| Honors English 10 | EN250 | 10 | 1 | $\checkmark$ | C or better in Engl. 9/Honors Engl. 9 or teacher approval |
| English 11 | EN310 | 11 | 1 | $\checkmark$ |  |
| Honors English 11 | EN 350 | 11 | 1 | $\checkmark$ | C or better in Engl. 10/Honors Engl. 10 or teacher approval |
| English 12 | EN410 | 12 | 1 | $\checkmark$ |  |
| English Composition 1 \& 2 (NCCC) | Comp 1 <br> ENG491 <br> Comp 2 <br> ENG492 | 12 | 1 | $\checkmark$ | Contact the college/career counselor for requirements |

ENGLISH 9 - English 9 course is designed to continue the instruction of writing, reading, speaking, listening, researching, and critical thinking skills. Students learn about the alternate aims and audiences of written compositions by writing multi-paragraph essays. Students will evaluate and analyze literature as well as utilize the writing process for a variety of purposes. Multiple facets of teaching research skills will be embedded in the reading-writing connection. Students will practice discussion skills as well as small group and individual presentations. The pace of the course will be rigorous in preparation for college expectations.

HONORS ENGLISH 9 - The arrangement of this class will be based around units covering numerous forms of literature where knowledge over the content will ultimately be assessed through diverse types of writing assignments. Outside reading will be required of all students; for this class there will be a three book minimum per semester. This course will provide each student with a wide survey of all aspects of the literary world. Student success will depend on an openness to discuss, evaluate and interpret numerous types of reading as well as the willingness to express what the student is learning. Study and note-taking skills will also be addressed in order to prepare for future success in all course work at the secondary level.

ENGLISH 10 - This course will focus on areas of language, composition, literature, and writing. Literary appreciation will be addressed in the form of a response-based literature approach along with standard literary elements using short stories, both modern and classic novels, poems and articles. Through reading, students will also be encouraged to participate in collaborative work groups, deep discussions, analysis of themes, and making connections between their lives, society, and other literary works. Students will utilize the writing process for a variety of purposes. The pace of the course will be rigorous in preparation for college expectations.

HONORS ENGLISH 10 - The skills of writing, reading, speaking, listening, critical thinking, and time management will be stressed. A response-based approach to literature will be used to help develop life-long reading skills. Outside reading will be required of all students; for this class there will be a three book minimum per semester. The writing process will be used to prepare students for college level assignments as well as real-world purposes such as Express and Reflect, Inform and Explain, Evaluate and Judge, Inquire and Explore, Analyze and Interpret and Take a Stand/Propose a Solution. Students will practice formal discussion skills, collaborate in small groups and present individually as well as in small groups.

ENGLISH 11 - The course will focus on writing to prepare each student for the type of professional communication they will engage in post high school year in college, jobs and beyond. This course focuses on technical communication through presentations of specialized information in an accessible way to a variety of different audiences. Students will engage in writing many genres for relevant purposes and addressing specific audiences. In addition, students will read American Literature for examples and relevance and apply critical thinking through their writing. The pace of the course will be rigorous in preparation for college expectations.

HONORS ENGLISH 11 - This course will survey American Literature from Colonial America to the present. A variety of literary forms will be studied, and students will be encouraged to experiment with different writing styles, all with the purpose of applying advanced reading and writing skills. Emphasis will be on critical thinking and problem solving skills through application, critical thinking through group interaction, oral communication skills, and clear expression of spoken and written ideas. Outside reading will be required of all students; for this class there will be a four book minimum per semester. In addition students will be responsible for not only a wide variety of written work, but a research paper to show higher level thinking and preparation over an idea or a concept.

ENGLISH 12 - This course presents an overview of British Literature as well as utilizing modern autobiographies that address contemporary struggles, allowing students to concentrate on the reading and analysis of these works and the writing of critical essays and research pieces. This class will encourage students to recognize and use their own voices through various methods of expression. In addition, students will learn to interpret others' voices from literature, media, popular culture, and historical events. This course will include required readings of epic poems, short stories, novels, and plays/screenplays as well as readings on moral, political, and social issues to acquaint students with contrasting opinions and to encourage them to organize their own ideas on these issues. Students in this class will apply reading and writing skills in creating and carrying out a project of their choosing that uses their passion to positively impact others. The pace of the course will be rigorous in preparation for college expectations.

ENGLISH COMPOSITION $1 \& 2$ - These courses present an overview of British Literature with an emphasis on science fiction, concentrating on the reading and analysis of literary works and the writing of critical essays and a research paper. Outside reading will be required of all students; for this class there will be a five book minimum per semester. This class will encourage students to recognize and use their own voices through various methods of expression. In addition, students will learn to interpret others' voices from literature, media, popular culture and historical events. This course will include required readings of epic poems, short stories, novels and plays/screenplays as well as readings on moral, political, and social issues are used to acquaint students with contrasting opinions and to encourage them to organize their own ideas on these issues. Practice in effective writing and development of an adequate vocabulary are emphasized. Practice in the fundamentals of writing with emphasis on grammatical correctness, acceptable usage, and effective organization of ideas will be stressed.

| Mathematics |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course | Course <br> Number | Grade | Credit | NCAA | Prerequisites |
| Algebra 1 | MA110 | 9, 10, 11, 12 | 1 | $\checkmark$ |  |
| Algebra A/B | MA102 | 9 | 1 |  | Dual Enroll A/B Plus \& teacher placement |
| Basic Geometry | MA105 | 9, 10, 11, 12 | 1 |  | Assessment Scores and Completion of Algebra A/B |
| Geometry | MA111 | 9, 10, 11, 12 | 1 | $\checkmark$ | Algebra 1 |
| Algebra 2 | MA211 | 10, 11, 12 | 1 | $\checkmark$ | Geometry |
| Basic Algebra 2 | MA210 | 10, 11, 12 | 1 |  | Geometry \& teacher placement |
| Pre-Calculus | MA325 | 11, 12 | 1 | $\checkmark$ | Algebra 2 |
| Calculus (NCCC) | MA491 | 11, 12 | 1 | $\checkmark$ | Contact the college/career counselor for requirements |
| Algebra 3 | MA411 | 12 | 1 | $\checkmark$ | Algebra 2 |
| College Algebra (NCCC) | MAT390 | 11, 12 | 0.5 | $\checkmark$ | Contact the college/career counselor for requirements |
| Elementary Statistics (NCCC) | MAT391 | 11, 12 | 0.5 | $\checkmark$ | Contact the college/career counselor for requirements |

ALGEBRA 1 - This course is an introduction to the language of algebra. Concepts covered in this class include variables, polynomial equations, functions, expressions in one and two variables, quadratic polynomials, graphing, and other topics. Problem solving skills are stressed throughout the course. Operations with rational and irrational numbers as well as integers are learned, as well as applying these systems to variable expressions, equations and inequalities.

ALGEBRA A/B - Placement will be based on assessment scores and OMS math teacher recommendation.
This course will cover the same concepts as Algebra 1. Emphasis will be placed on basic skills and problem solving, in addition to the topics listed for Algebra 1.

BASIC GEOMETRY - Placement will be based on assessment scores and students coming from Algebra A/B. This course will cover the same concepts as Geometry. Emphasis will be placed on basic skills and problem-solving, in addition to the topics listed for Geometry.

GEOMETRY 1 - This course is designed to provide an abstract, formal approach to the study of Euclidean plane geometry with emphasis on deductive proof, congruence, and precision of language. The major components of the class include deductive and inductive logic, the application of logic to geometric concepts, lines, polygons, coordinate geometry, and constructions.

ALGEBRA 2 - Algebra 2 will further develop the student's understanding of basic algebraic skills, including linear equations and inequalities in one variable. Quadratic functions and equations, solve polynomials by factoring, completing the square and the quadratic formula, data analysis, probability, polynomial functions and operations, rational functions and equations, and exponential and logarithmic functions will be introduced. Applications to various real-life situations of concepts will be explored.

BASIC ALGEBRA 2 - Topics covered in this course will be many of the same concepts as Algebra 2. This course will enhance basic skills, focusing on linear and quadratic equations. In addition, the topics of rational and polynomial functions will be introduced and explored.

PRE-CALCULUS - Pre-Calculus will combine the study of trigonometry, elementary functions, analytic geometry and math analysis topics as preparation for calculus. This course emphasizes the study of circular and trigonometric functions including their graphs, inverses, identities, matrices, polar coordinates, and complex numbers. Other topics included will be studies of analytic geometry, and polynomial functions.

ALGEBRA 3 - Studies show that a major indicator of success in college is taking a math class during the senior year of high school. This course is intended to prepare students to be successful in a college level Algebra course. Topics covered will be equations and inequalities, absolute value, functions and graphs, polynomials, rational expressions and radicals, and systems of equations and inequalities. Financial literacy topics will be covered.

CALCULUS (NCCC) - Topics covered include: differentiation, integration, limit theory, graphing, areas under curves, acceleration and velocity, and other applications. Students looking to further their understanding of advanced mathematics or planning to major in a scientific discipline should consider this course. This course can be taken with the option of enrolling in a College Calculus I class.

COLLEGE ALGEBRA (NCCC) - It is recommended but not required to have completed PreCalculus; can be enrolled concurrently in Pre-Calculus, NCCC tuition. This is a standard College Algebra course designed for students who have successfully completed Algebra 1 and Algebra 2 in high school. Topics covered are: polynomials, rational expressions and radicals, equations and inequalities, absolute value, functions and graphs, rational functions, exponential and logarithmic functions, conic sections, matrices and systems of equations and inequalities.

ELEMENTARY STATISTICS (NCCC) - Calculation techniques for descriptive statistics, normal distributions, confidence intervals, sample size, hypothesis testing, and correlation will be presented. The application problems make this course appropriate for psychology, sociology, business, computer science, biology, education, liberal arts, technology, social science, nursing and allied health care, economics, ecology, and agriculture.

| Science |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course | Course <br> Number | Grade | Credit | NCAA | Prerequisites |
| Biology | SC110 | 9 | 1 | $\checkmark$ |  |
| Physical Science | SC214 | 10 | 1 | $\checkmark$ |  |
| Advanced Physical Science | SC217 | 10 | 1 | $\checkmark$ | Over summer by teacher recommendation |
| Anatomy and Physiology | SC350 | 11, 12 | 1 | $\checkmark$ | Biology |
| Chemistry | SC213 | 10, 11, 12 | 1 | $\checkmark$ | Biology, Physical Science/Advance Physical Science |
| Physics | SC310 | 10, 11, 12 | 1 | $\checkmark$ | Biology, Physical Science/Advance Physical Science |
| Integrated Science | SC317 | 11, 12 | 1 | $\checkmark$ |  |
| Zoology | SC312 | 11, 12 | 1 | $\checkmark$ | Biology with a C or higher |
| College Biology w/ Lab (NCCC) | SC390 | 10,11, 12 | 1 | $\checkmark$ | Contact the college/career counselor for placement requirements |
| College Anatomy and Physiology (NCCC) | SC395 | 10,11, 12 | 1 |  | Contact the college/career counselor for placement requirements |

BIOLOGY - Biology is an introductory course for students that will teach the basics of life science and laboratory techniques. This course is designed to cover all aspects of NGSS:Molecules to Organisms, Heredity, Ecosystems, and Biological Evolution. Coursework, lab work, projects, and assessments will prepare students for future science courses.

PHYSICAL SCIENCE - Students survey topics such as forms of energy, wave phenomenon, electromagnetism and physical and chemical interactions.Students will spend additional time enhancing basic physical science skills while incorporating their math skills to address real world science problems. Students who would benefit from additional time enhancing math and conceptual science skills should enroll in the physical science course.

ADVANCED PHYSICAL SCIENCE - Students may take this course during the summer between 9th and 10th grade school year based on teacher recommendation independently via Edmentum. Students survey topics such as forms of energy, wave phenomenon, electromagnetism and physical and chemical interactions. Students who are recommended to engage in advanced physical science over the summer, have the ability to enhance their understanding of deeper level science courses by having more time and opportunities to take advanced or college courses offered by OHS, including physics, chemistry, college biology, or anatomy and physiology.

ANATOMY AND PHYSIOLOGY - This is a college preparatory class focusing on the anatomy and physiology of the human body. Biochemistry and cell biology are covered in depth as well as a thorough study of the muscular, skeletal, nervous, endocrine, cardiovascular, digestive, immune and reproductive systems. Laboratory focuses on dissection. This is an excellent introduction to the human body for the pre-med and nursing pathways

CHEMISTRY - Concepts that will be covered include:the metric system, problem solving, the periodic table, dimensional analysis, the mole concept, naming of chemical compounds, and chemical reactions. Students who take this course should have strong math and reading skills and should be able to acquire new skills/concepts quickly. Students who intend to take Chemistry as a sophomore must enroll in and pass Advanced Physical Science with a C or higher grade in their freshmen year or the summer between freshmen and sophomore year, beginning with the class of 2022.

PHYSICS - Physics is the study of matter and energy. This course advances and extends topics introduced in previous science courses. Topics in physics include motion, forces, momentum, energy, waves, sound, electricity, magnetism, light, and selected advanced topics. Students who intend to take Physics as a sophomore must enroll in and pass Advanced Physical Science with a C or higher grade in their freshmen year or the summer between freshmen and sophomore year, beginning with the class of 2022. A strong mathematics background is highly recommended.

INTEGRATED SCIENCE - This course will investigate a variety of science topics not limited to any one area of study. It is an alternate junior or senior course exploring science issues, applications, careers, and vocabulary and laboratory skills. Current science standards and standardized testing skills will be a focus, strengthening knowledge and skills while providing the student with confidence when encountering these situations. Students who are college bound and will need college science are still encouraged to complete chemistry, physics, or college biology following this course.

ZOOLOGY - In this course we will be studying the different classifications of the animal kingdom by comparing anatomical structures, understanding vocabulary, learning the how and the why of their classification, and dissection techniques. There will be some emphasis in the general conservation of our ecosystem.

COLLEGE BIOLOGY W/ LAB (NCCC) - This is an introductory biology class designed for non-majors (Biology) to fulfill a five-hour biology requirement. Course work includes the study of basic biological principles, plants, animals, microorganisms, and the environment in which organisms live. By studying these areas, the student is exposed to a sampling of the major fields of biological study. The laboratory exercises in this course will reinforce the fundamental principles and processes of life taught in the lecture portion of the course.

COLLEGE ANATOMY AND PHYSIOLOGY W/LAB (NCCC) - This is a college preparatory class focusing on the anatomy and physiology of the human body. Biochemistry and cell biology are covered in depth as well as a thorough study of the muscular, skeletal, nervous, endocrine, cardiovascular, digestive, immune and reproductive systems. Laboratory focuses on dissection. This is an excellent introduction to the human body for the pre-med and nursing pathways

| Social Studies |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course | Course <br> Number | Grade | Credit | NCAA | Prerequisites |
| World History | SO210 | 10 | 1 | $\checkmark$ |  |
| American History | SO310 | 11 | 1 | $\checkmark$ |  |
| College American History (NCCC) | SO311 | 11 | 1 | $\checkmark$ | Earned a C or above in World History and contact the college/career counselor for requirements |
| American Government | SOC410 | 12 | 0.5 | $\checkmark$ |  |
| College American Government (NCCC) | SOC490 | 12 | 0.5 | $\checkmark$ | Earned a C or above in American History and contact the college/career counselor for requirements |
| Economics | SOC411 | 12 | 0.5 | $\checkmark$ |  |
| CP Economics | SOC451 | 12 | 0.5 | $\checkmark$ |  |
| Sociology | SOC312 | 11, 12 | 0.5 | $\checkmark$ |  |
| College General Psychology (NCCC) | SOC491 | 10,11, 12 | 0.5 | $\checkmark$ | Contact the college/career counselor for requirements |

WORLD HISTORY - This is a Western Civilization course covering the Renaissance to early $20^{\text {th }}$ Century World History.

AMERICAN HISTORY - This course is the study of $20^{\text {th }}$ and $21^{\text {st }}$ century American History.
COLLEGE AMERICAN HISTORY (NCCC) - The purpose of this course is to survey the economic, social and political development of the United States from the end of Reconstruction to the present. College level instructional methods and evaluations will be utilized. This course can be taken for college credit through NCCC. The student is responsible for meeting admission requirements and all tuition.

AMERICAN GOVERNMENT - This is an introductory course in the American governmental process. Students will examine the American political system in regards to its purpose, organization, and functions as it relates to the Executive, Legislative, and Judicial branches.

COLLEGE AMERICAN GOVERNMENT (NCCC) - This is an introductory course in Political Science, which examines the fundamental elements of the United States political system with an emphasis on the constitutional foundations of the democratic system, its institutional structure, and the policy processes used in governing a democratic nation. This course is for college credit through NCCC. The student is responsible for meeting admission requirements and all tuition.

ECONOMICS - Economics is the study of decision-making. The course covers the way society chooses to produce and distribute goods and services, our roles as both consumers and producers, the role of government in the economy, the Federal Reserve System, market structures, the organization of business, the tax system, employment, types of investments and consumer skills.

CP ECONOMICS - This course is a study of decision-making and the principles of business, money and employment. The course will include the study of economic systems, choices facing consumers, investors and producers and current economic/ political topics. It will be taught and assessed similar to a college course.

SOCIOLOGY - This course is about the study of human relationships. Emphasis will be placed on American Society and its socialization process.

GENERAL PSYCHOLOGY (NCCC) - This course is an introduction to the science of psychology, including an emphasis on its historical and philosophical basis, the underlying principles of scientific methodology, as well as the principles of neuroscience, learning, intelligence, sensation/perception, motivation, emotion, consciousness, personality, life-span development, and psychopathology and treatment, among others.

| Physical Education | Course |  |  |  |  |  | Course <br> Number | Grade | Credit | NCAA |  |
| :--- | :--- | ---: | ---: | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | PH110a | 9 | 0.5 |  |  |  |  |  |  |  |  |
| PE9-Boys | PH111a | 9 | 0.5 |  |  |  |  |  |  |  |  |
| PE9-Girls | PH109b | 9 | 0.5 |  |  |  |  |  |  |  |  |
| Health \& Fitness-Boys | PH113b | 9 | 0.5 |  |  |  |  |  |  |  |  |
| Health \& Fitness-Girls | PH214 | 9 | 1 |  | $65 \%$ summer workout attendance |  |  |  |  |  |  |
| Freshman Weight Training | PH210 | $10,11,12$ | 1 |  | PE 9 |  |  |  |  |  |  |
| Fitness for Life | PH112 | $10,11,12$ | 1 |  | PE 9 |  |  |  |  |  |  |
| Weightlifting | PH211 | $10,11,12$ | 1 |  | PE 9 |  |  |  |  |  |  |
| Female Weightlifting | PH215 | $9,10,11,12$ | 1 |  | Coach placement |  |  |  |  |  |  |
| Zero Hour Weights | SP115 | $9,10,11,12$ | 0.5 |  | Administrator Approval |  |  |  |  |  |  |
| Adaptive PE | SPD232 | 9 | 0.5 |  | Administrator Approval |  |  |  |  |  |  |
| Adaptive Health and Fitness |  |  |  |  |  |  |  |  |  |  |  |

PE9- BOYS - This course satisfies the PE requirement for graduation per the Kansas State Law. Emphasis is placed on developing adequate fitness, strength, and basic movement skills

PE9-GIRLS - This course satisfies the PE requirement for graduation per the Kansas State Law. Emphasis is placed on developing adequate fitness, strength, and basic movement skills.

HEALTH \& FITNESS-BOYS - Health and Fitness course combines the topics of a Health Education course (nutrition, stress management, substance abuse prevention, disease prevention, first aid, and so on) with an active fitness component (typically including aerobic activity and fitness circuits) with the intention of conveying the importance of life-long wellness habits.

HEALTH \& FITNESS-GIRLS - . Health and Fitness course combines the topics of a Health Education course (nutrition, stress management, substance abuse prevention, disease prevention, first aid, and so on) with an active fitness component (typically including aerobic activity and fitness circuits) with the intention of conveying the importance of life-long wellness habits.

FRESHMAN WEIGHT TRAINING - This course is designed for incoming freshmen to participate in a vigorous weight training program. Students are taught how to lift safely, and proper technique will be taught before any high-intensity workout is attempted. Plyometric, static, dynamic stretching, agility, and quickness drills will also be stressed. Teamwork will be stressed. Freshmen students who complete $65 \%$ of all previous summer workouts will be eligible for the course. Enrollment in Freshmen Health is required.

FITNESS FOR LIFE - This course will center on the theory and practical application of conditioning programs. Strength, muscle development, flexibility, rehabilitation of injuries, and prevention of injuries will be stressed. Students will learn the theory behind and value of staying fit throughout their lifetime. Recreational activities as well as traditional and nontraditional team sports will be incorporated. All students are expected to dress properly for class and shower each day.

WEIGHTLIFTING - Students will participate in a vigorous weight training program as well as plyometric and flexibility training. Team work will be stressed and a positive attitude is required.

FEMALE WEIGHT TRAINING - Female students will participate in a vigorous weight training program structured for the female as well as plyometric and flexibility training. Teamwork will be stressed and a positive attitude is required.

ZERO WEIGHT TRAINING - Students will participate in a vigorous weight training program as well as plyometric and flexibility training. Team work will be stressed and a positive attitude is required.Freshman students that completed $65 \%$ of all previous summer workouts will be eligible to participate in this class. Attendance is mandatory and a grade will be given.

ADAPTIVE PE-This course satisfies the PE requirement for graduation per the Kansas State Law. This course is designed to meet students' individual needs through smaller numbers and requires administrator approval. Emphasis is placed on developing adequate fitness, strength, and basic movement skills.

ADAPTIVE HEALTH \& FITNESS-This course combines the topics of a Health Education course (nutrition, stress management, substance abuse prevention, disease prevention, first aid, and so on) with an active fitness component (typically including aerobic activity and fitness circuits) with the intention of conveying the importance of life-long wellness habits.

## Fine Arts

| Art - 2D | Course |  |  |  |  |  |  | Course <br> Number | Grade | Credit | NCAA |  | Prerequisites |
| :--- | ---: | ---: | ---: | ---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ART112 | $9,10,11,12$ | 0.5 |  |  |  |  |  |  |  |  |  |  |
| Drawing I | ART114 | $9,10,11,12$ | 0.5 |  | Drawing |  |  |  |  |  |  |  |  |
| Drawing II | ART117 | $10,11,12$ | 0.5 |  | Drawing II |  |  |  |  |  |  |  |  |
| Drawing III | ART118 | $10,11,12$ | 0.5 |  | Drawing III |  |  |  |  |  |  |  |  |
| Drawing IV | ART120 | $9,10,11,12$ | 0.5 |  | Drawing I |  |  |  |  |  |  |  |  |
| Painting I | ART122 | $10,11,12$ | 0.5 |  | Painting I |  |  |  |  |  |  |  |  |
| Painting II | ART124 | $10,11,12$ | 0.5 |  | Painting II |  |  |  |  |  |  |  |  |
| Painting III | ART126 | 11,12 | 0.5 |  | Painting III |  |  |  |  |  |  |  |  |
| Painting IV |  |  |  |  |  |  |  |  |  |  |  |  |  |

DRAWING I - Students will develop drawing skills while working with a variety of drawing materials such as pencil, pastels, charcoal and ink. Students will learn about a variety of drawing techniques and subject matter as well as study artists, both historical and contemporary and art styles. Students will be required to keep and maintain a sketchbook to further their drawing skills.

DRAWING II - Students will expand their drawing skills learned in Drawing I. Students will study more advanced techniques using various drawing media used in Drawing I as well as explore a wider range of subject matter. Students will be required to keep and maintain a sketchbook for this class.

DRAWING III - Students will delve more deeply into their drawing skills and will be encouraged to create their own personal drawing style. The use of various drawing materials and techniques will be continued. Emphasis will be placed on the quality and craftsmanship of the works created by the student. Students will be required to keep and maintain a sketchbook.

DRAWING IV - In this class, students will be encouraged to further their study of the various drawing materials and to further develop their own personal drawing style. Emphasis will be placed on original concepts that show high quality craftsmanship. Students will be required to keep and maintain a sketchbook.

PAINTING I - Students will explore painting techniques while working with tempera, acrylics, and watercolors. A variety of painting subjects will be studied along with historic and contemporary artists.

PAINTING II - Students will continue their study of the painting materials learned in Painting I and will explore painting with oil paints and stretching a canvas. Students will continue to study both historic and contemporary artists with an emphasis on painters.

PAINTING III - In this class, students will build on their knowledge and the techniques learned from Painting II. Students will be encouraged to create their own painting style. Emphasis will be placed on developing high quality artistic craftsmanship along with meaningful concepts in the students' paintings.

PAINTING IV - In this class, students will continue to build their knowledge of the various painting media and will be encouraged to explore and develop their own painting style. Emphasis will be on craftsmanship, personal growth and original, innovative concepts.

| Art - 3D |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | :--- |
|  | Course | Course <br> Number | Grade | Credit | NCAA |
| Metals I | ART134 | $9,10,11,12$ | 0.5 |  |  |
| Metals II | ART140 | $9,10,11,12$ | 0.5 |  | Metals I |
| Metals III | ART142 | $10,11,12$ | 0.5 |  | Metals II |
| Ceramics I | ART130 | $9,10,11,12$ | 0.5 |  |  |
| Ceramics II | ART136 | $9,10,11,12$ | 0.5 |  | Ceramics I |
| Ceramics III | ART144 | $10,11,12$ | 0.5 |  | Ceramics II |

METALS I - This course introduces students to the design and fabrication of small-scale metal objects and jewelry. After passing a mandatory safety test, students will explore a variety of metalworking techniques, including sawing, cold connections, and soldering. Introductory surface design techniques including etched, enameled, and pressed metal will be explored. Students will study historic and contemporary jewelry and metal artists. Attention to detail is required to be successful in this course.

METALS II - Students will build on the knowledge and small-scale metal working skills learned in Metals I. Stone setting and close form metal construction techniques will be introduced. Students will continue to study historic and contemporary jewelry and metal artists throughout this course.

METALS III (Can be repeated) - This class builds on the knowledge and techniques learned in Metals II. Students are encouraged to develop their own artistic direction as they create with metal. Emphasis is placed on developing high quality artistic craftsmanship and meaningful artistic concepts. Student work will be included in art exhibitions towards the end of the Spring semester.

CERAMICS I - Students will learn terminology and clay hand-building techniques in this introductory level ceramics course. Basic surface design and glaze techniques will also be covered. Students will study the history of ceramics from ancient to modern day, and explore a variety of historic and contemporary ceramic artists.

CERAMICS II - Students will build on the hand-building clay construction knowledge learned in Ceramics I. Wheel-thrown ceramics will be introduced in this course. Advanced surface design techniques will be explored through a variety of decorative and functional ceramic projects. Historic and contemporary ceramic artists will be studied throughout this course.

CERAMICS III (Can be repeated) - This class builds on the knowledge and techniques learned in Ceramics II. Students are encouraged to develop their own artistic direction as they create with clay. Emphasis is placed on developing high quality artistic craftsmanship and meaningful artistic concepts. Student work will be included in art exhibitions towards the end of the Spring semester.

| Music - Vocal |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course | Course <br> Number | Grade | Credit | NCAA | Prerequisites |
| Foundations in Singing | MU214 | 9, 10, 11, 12 | 0.5 |  | Instructor permission |
| Women's Choir | MU110 | 9, 10, 11, 12 | 1 |  |  |
| Concert Choir | MU113 | 9, 10, 11, 12 | 1 |  |  |
| Varsity Men | MU111 | 9, 10, 11, 12 | 1 |  |  |
| Cytones | MU150 | 10, 11, 12 | 1 |  | Audition |
| Chamber Choir | MU213 | 10, 11, 12 | 1 |  | Audition |

FOUNDATIONS IN SINGING - This course is designed for vocal music students who need more work on the fundamental concepts of singing: pitch-matching, tone, rhythm, music literacy, etc. Students enrolled in this course will have the opportunity to perform with Concert Choir at concerts but will rehearse separately in order to learn music at a slower pace and gain more individualized learning. Students who make significant progress in this course have the option of moving to the full ensemble at semester.

WOMEN'S CHOIR - Students in this non-auditioned choir will review music fundamentals, practice female vocal technique, learn sight-reading using solfege and Curwen hand signs, and study the anatomy and physiology of singing. The choir sings SSAA literature and is challenged to sing a wide variety of musical styles. Students have the opportunity to audition for and participate in the District and State Choirs, as well as prepare solos for Regional and State Music Festivals. As the Women's Choir is a performance-based class, grades are based on daily participation as well as performance, attendance, and oral and written assignments/tests. Students in performance-based classes must maintain their grades and remain eligible in order to participate in events outside of class.

CONCERT CHOIR - Students in this non-auditioned, developing choir will review music fundamentals, practice vocal technique, learn sight-reading using solfege and Curwen hand signs, and study the anatomy and physiology of singing. They will prepare music for and participate in fall, winter, and spring concerts, and Variety Show. The choir sings SAB or SATB literature and is challenged to sing a wide variety of musical styles. Students have the opportunity to audition for and participate in the District and State Choirs, as well as prepare solos for Regional and State Music Festivals. As Concert Choir is a performance-based class, grades are based on daily participation as well as performance, attendance, and oral and written assignments/tests. Students in performance-based classes must maintain their grades and remain eligible in order to participate in events outside of class.

VARSITY MEN - Students in Varsity Men will review music fundamentals, practice male vocal technique, study the male changing voice, learn sight-reading using solfege and Curwen hand signs, and study the anatomy and physiology of singing. The choir will sing men's literature and be challenged to sing a wide variety of musical styles. The choir will participate in fall, winter, and spring concerts as well as Variety Show. Students have the opportunity to audition for and participate in the District and State Choirs, as well as prepare solos for Regional and State Music Festivals. As Varsity Men is a performance-based class, grades are based on daily participation as well as performance, attendance, and oral and written assignments/tests. Students in performance based classes must maintain their grades and remain eligible in order to participate in events outside of class.

CYTONES - Music is varied and will include show choir pieces, madrigals/art songs, and contemporary/pop literature. Themed, choreographed shows are used as feature shows in performances in and around the Ottawa community. The Cytones participate in fall, winter, and spring concerts, and Variety Show. Students have the opportunity to audition for and participate in the District and State Choirs, as well as prepare solos for Regional and State Music Festivals. Auditions are held in the spring and students must expect to make a year-long commitment to the group. Students are expected to participate in fundraisers held throughout the year to offset the costs of travel and activities. Students will be expected to
purchase their show choir attire. Select choir members are encouraged to enroll in a large music ensemble in addition to Cytones. As Cytones is a performance-based class, grades are based on daily participation as well as performance, attendance, and oral and written assignments/tests. Students in performance-based classes must maintain their grades and remain eligible in order to participate in events outside of class.

CHAMBER CHOIR - This choir is an auditioned ensemble which sings challenging, collegiate-level literature. The focus of the choir is on advanced vocal technique and complex harmonies. The choir will participate in fall, winter, and spring concerts, and Variety Show as well as frequent performances in and around the community. Students have the opportunity to audition for and participate in the District and State Choirs, as well as prepare solos for Regional and State Music Festivals. Auditions are held in the spring and students must expect to make a year-long commitment to the group. Students are expected to participate in fundraisers held throughout the year to offset the costs of travel and activities. Students will be expected to purchase their formal attire. Select choir members are encouraged to enroll in a large music ensemble in addition to Chamber Choir. As Chamber Choir is a performance-based class, grades are based on daily participation as well as performance, attendance, and oral and written assignments/tests. Students in performance-based classes must maintain their grades and remain eligible in order to participate in events outside of class.

| Music - Instrumental | Course <br> Number |  |  |  |  |  | Grade | Credit | NCAA |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Marching Band/Concert Band | MU112 | $9,10,11,12$ | 1 |  | Prerequisites |  |  |  |  |  |
| Percussion Techniques/Ensemble | MU215 | $9,10,11,12$ | 1 |  | Instructor permission |  |  |  |  |  |
| Jazz Ensemble | MU151 | $9,10,11,12$ | 1 |  | Audition |  |  |  |  |  |
| Explorations in Music | MUS116 | $9,10,11,12$ | 0.5 |  |  |  |  |  |  |  |
| Music Theory | MU212 | $9,10,11,12$ | 0.5 |  |  |  |  |  |  |  |
| Music Appreciation | MUS114 | $9,10,11,12$ | 0.5 |  |  |  |  |  |  |  |
| Applied Music | MU116 | $10,11,12$ | 0.5 |  | Instructor permission |  |  |  |  |  |

MARCHING BAND/CONCERT BAND - The Ottawa High School Band incorporates marching band class starting out in the late summer with marching band camp occurring right before school starts. Students enrolled in this course will perform in the marching band through the 1st and possible 2 nd quarter depending on the season. The 2nd, 3rd, and 4th quarters switch over to concert band and the musical literature performed will focus on a variety of genres performed including marches, ballads, fanfares, and novelty pieces. Pep band will also be incorporated into the class while basketball season is occurring but will not be the focus of the class. Students enrolled in this course will be graded on playing tests, self-assessments, written work, attendance, and group participation. Concerts and athletic performances are required of each OHS Band student. Students must purchase a band show shirt and matching shoes prior to school beginning in August. The concert band will have the opportunity to perform at KSHSAA State performances and students have the opportunity to try out for district band and jazz during the fall semester.

PERCUSSION TECHNIQUES/ENSEMBLE - This class will specifically go into detail about the techniques of marching and concert percussion style. Students in this percussion class will get an in-depth approach to the various techniques of percussion instruments and will be involved in performances. This class will also provide students the opportunity to explore, rehearse and perform from a large variety of percussion repertoire. This class will focus on percussion rudiments, refining chamber ensemble playing, and a heavy focus on marching percussion during the fall semester. The students will also get the opportunity to be well versed as an all-around percussionist basing skill sets learned on battery and pitched percussion instruments.

JAZZ ENSEMBLE - Jazz Ensemble class is an auditioned ensemble which has students learn about the music genres of swing, rock, latin and more! Students enrolled in this course must have prior knowledge of reading on their primary instrument and are enrolled in another performance based class (choral/band). Jazz ensemble will teach students about how to read jazz notation, learn to improvise over a variety of tunes and become overall better musicians at Ottawa High School. Jazz Ensemble will include performances separate from other choral/band classes. Students who make it into this ensemble will be asked to purchase "concert black" attire for performances.

EXPLORATIONS IN MUSIC - This course includes units of study in the areas of music history, music theory, music and the brain, music technology, musical theater and hands-on percussion practice. It also includes elements of singing and performing, especially for uncertain singers or singers wanting to enter a choir but not yet comfortable doing so. No previous musical experience is necessary.

MUSIC THEORY - This course is an introduction to the basics of music theory, music notation, note recognition, rhythm reading and pitch discrimination. Students will learn the basics of major and minor scales, building chords, and creating chord progressions.

MUSIC APPRECIATION - This course is a music appreciation course that highlights, in addition to music, art, architecture, dance, photography, and inventions, as they coincide through history, and how they affected the progression of music.

APPLIED MUSIC - This class is designed for any student with previous musical experience, vocal or instrumental (string, piano, or wind instruments). Students enrolled in this course will be provided with instruction on both individual and small group performance techniques. Students enrolled in this course will be expected to prepare a solo or participate in a small ensemble for performance at the Chamber Concert in the spring, and participate in the KSHSAA solo and small ensemble festival in April. Other performance opportunities will be presented throughout the year. Students will be graded on their daily participation, activity completion and their progress throughout the year.

| Foreign Language |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course | Course <br> Number | Grade | Credit | NCAA | Prerequisites |
| Spanish 1 | FO110 | 9, 10, 11, 12 | 1 | $\checkmark$ |  |
| Spanish 2 | FO210 | 10, 11, 12 | 1 | $\checkmark$ | Spanish 1 |
| Spanish 3 | FO310 | 11, 12 | 1 | $\checkmark$ | Spanish 2 |
| Spanish 4 | FO410 | 12 | 1 | $\checkmark$ | Spanish 3 |

SPANISH 1 - This course is an introduction to the culture and the language of the Spanish speaking world. Students will begin to master pronunciation, verb structures in the present, and a basic vocabulary, including the alphabet, classroom objects and expressions, numbers, calendar, time, school subjects, money exchange, food, activities, clothing, occupations, and geography. Cultural experiences are provided by using contemporary music, magazines and newspapers, commercials, role-playing, skits, and web based activities. Students will be assessed on their skills in reading, writing, listening, speaking, and cultural knowledge. Daily participation, thorough note-taking, and timely completion of assigned work are essential to success in Spanish 1.

SPANISH 2 - This course provides an opportunity for students to review basic language skills, acquire mastery of present, past, future verb tenses, and add new vocabulary, including weather, places to visit, parts of the body, animals, holidays, sports, health, feelings, and travel. Students will be asked to make cultural comparisons, contrasts and inferences and should be willing to use their language skills whenever possible in the classroom. There will be readings in both Spanish and English which deal with culture, history and folklore in the Spanish-speaking world. Spontaneous conversational skills and performance will be evaluated by oral and written quizzes and examinations. Grades will be determined by performance in the following areas: attitude, participation, and assignments, listening skills, speaking skills, writing skills, cultural knowledge, and reading skills. Memorization, correct spelling and accurate punctuation will be required.

SPANISH 3 - Students will review and expand all previous vocabulary areas and verb tenses as well as acquire mastery of conditional and compound verb tenses.Extensive reading, oral discussion and writing will be supplemented with a comprehensive review of grammar. These skills will be used to expand students' knowledge of history, literature, art and music of the Spanish-speaking world. Evaluation consists of participation in oral discussions, group productions as well as compositions and written examinations. Class is conducted in Spanish.

SPANISH 4 - Students will review and expand all previous vocabulary areas and verb tenses. The focus is strengthening oral communication. In-depth examination of literature, history, and contemporary issues is expected. Evaluation depends upon oral proficiency and written assignments and examinations. Class is conducted in Spanish.

| Theater | Course | Course <br> Number | Grade | Credit | NCAA |  |
| :--- | :--- | :--- | ---: | ---: | :--- | :--- |
| PA101 | $9,10,11,12$ | 0.5 |  |  |  |  |
| Theatre Foundations | PA103 | $9,10,11,12$ | 0.5 |  | Theater I |  |
| Intermediate Foundations | PA107 | $10,11,12$ | 0.5 |  | Theater I |  |
| Folklore \& Fairy Tales in Theater | 11,12 | 0.5 |  | Theater I |  |  |
| Shakespeare: Histories \& Tragedies | PA108 | 11,12 | 0.5 |  | Theater I |  |
| Traditions Across the Globe: Cultures <br> \& Theatrical Performance | PA109 | $10,11,12$ | 1 |  | Theater II |  |
| Theatre Work Based Learning-Stage <br> Management | PA112 | 11,12 | 1 |  | Theater Foundations and Instructor <br> Permission |  |
| Practical Theater | PA114 | 11,12 |  |  |  |  |

FOUNDATIONS OF THEATER - This course provide an overview of the art, conventions, and history of the theater. Although the courses sometimes include experiential exercises, they emphasize learning about the theater rather than performance. Students learn about one or more of the following topics: basic techniques in acting, major developments in dramatic literature, major playwrights, the formation of theater as a cultural tradition, and critical appreciation of the art.

INTERMEDIATE FOUNDATIONS - This course provides a more in depth study of Theatre History, of acting styles and design trends. Stage makeup, introduction of improvisation, auditioning and blocking, costume/set/marketing designs, Stage fighting and movement, Shakespeare, script analysis and writing, scene work and One Act.

FOLKLORE \& FAIRY TALES IN THEATER - This is a more advanced class. An in-depth study of overall history \& importance of these tales/lore in human history, as it is definitely a storytelling aspect that influenced many stage writers; including Shakespeare. We will analyze many different texts and plays that deal with these tales/lores and the motivation behind why so many playwrights utilized them, the effects on audiences $\&$ the masses, and how they have become lost in translation through the centuries.

SHAKESPEARE: HISTORIES \& TRAGEDIES - This is also a more advanced class as it will deal with the darker aspects of the human condition. Oftentimes, these two genres of Shakespeare's plays are overlooked by younger folk for the comedies. In this class, we will look at several different plays from both genres, analyze them for historical accuracy and/or thematic ideas behind the human condition that are being used throughout. In the end, we will also gain a better understanding of why these plays are just as important for audiences as the comedies are.

TRADITIONS ACROSS THE GLOBE: CULTURES, \& THEATRICAL PERFORMANCE - This is a more advanced class. This will delve into how theater has developed \& evolved all over the world. Geographical regions, and histories shaping different types of storytelling for the stage that also revolve around audience expectations; giving students a glimpse into other cultures, customs and theater/acting styles in a worldly sense. We will also be analyzing different types of texts and plays from different cultures.

THEATRE WORK BASED LEARNING-STAGE MANAGEMENT - Fundamentals of stage management \& source material. Aesthetics of Theater and design. Organizational skills and time management. Effective communication of perceptions and ideas. Budget and publicity. Direct a scene (from Scriptwriting class) for Semester Showcase. *Required to help with the stage management responsibilities in major OHS show/s.

PRACTICAL THEATER - A theater arts course which focuses on the study and performance of drama including musical theater. These courses review a wide range of scripted materials, such as plays, screen plays, teleplays, readers' theater scripts, dramatic criticism, creation of original dramatic works, and the role of dramatic arts in society. In addition, students will work collaboratively on performances.

| Film | Course |  |  |  |  |  | Course <br> Number | Grade | Credit | NCAA | Prerequisites |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Film Studies I | PA113 | $9,10,11,12$ | 0.5 |  |  |  |  |  |  |  |  |
| Film Studies II | PA115 | $9,10,11,12$ | 0.5 |  | Film Studies I |  |  |  |  |  |  |
| Screenwriting for Film | PA116 | $10,11,12$ | 0.5 |  | Film Studies II, Computer Applications <br> and Instructor Permission |  |  |  |  |  |  |

FILM STUDIES I - Introduces the basics of film analysis, cinematic formal elements, genre, and narrative structure. From Silent to Superhero, a journey through film history looking at cinematography, editing, trends and movements, the representation of cultures and people, the place of film in society today.

FILM STUDIES II - A further exploration of the language of film. Explore theories of what makes film different from the other arts. Different movements within cinema-Expressionion, Realism, New Wave along with other types will be explored. Film as propaganda or moral compass, along with film criticism and careers in the industry will be investigated.

SCREENWRITING FOR FILM - A basic process of producing a scripted product for a few different types of film. Included in the process will be writing for multiple genres, while focusing on the importance of storytelling aspects, character building, and proper formatting.

## Other Fine Arts

| Course | Course <br> Number | Grade | Credit | NCAA |  |
| :--- | ---: | :--- | :---: | :---: | :--- |
| Speech | ENG111 | $9,10,11,12$ | 0.5 | $\checkmark$ |  |
| Debate | ENG113 | $9,10,11,12$ | 0.5 | $\checkmark$ |  |
| Forensics | ENG114 | $9,10,11,12$ | 0.5 |  |  |
| Creative Writing | ENG115 | $9,10,11,12$ | 0.5 | $\checkmark$ |  |
| Graphic Novel | ENG117 | $9,10,11,12$ | 0.5 | $\checkmark$ |  |
| Young Adult Literature | ENG116 | $9,10,11,12$ | 0.5 | $\checkmark$ |  |
| The Journey From Fiction to Film | ENG112 | $9,10,11,12$ | 0.5 |  |  |
| Advanced Leadership | FAC250 | $9,10,11,12$ | 0.5 |  | Intro to Leadership or instructor <br> permission |
| College Speech (NCCC) | ENG390 | $10,11,12$ | 0.5 | $\checkmark$ | Contact the college/career counselor for <br> requirements and placement options |

SPEECH - Speech is a semester-long course in the basics of public speaking and the nature of communication. Topics explored include why people communicate, channels of communication, problems in communication, public speaking, research skills, delivery techniques, organizational skills, and other topics. This is a performance-oriented class that demands every student's participation. It is designed and recommended for college-bound students, although the skills taught will be valuable for any student who wishes to overcome shyness, learn to speak more clearly, or learn to organize and present information.

DEBATE - Prerequisite: If repeating this course, students must have earned at least a C during previous enrollment This course is a competitive debate. Students must be responsible and self-motivated in order to excel. Students will use a wide range of researching and writing skills to develop their strengths in argumentative writing, public speaking, impromptu researching, and claim development. All students are required to compete in at least three Saturday tournaments. In addition, all students must assist in hosting the home tournament.

FORENSICS - Prerequisite: If repeating, must have earned at least a C during the previous enrollment This course is competitive speech and drama. Students must be responsible and self-motivated in order to excel. Students will use a wide range of performance skills to develop their strengths in public speaking, oral interpretation, and acting. All first and second year students must compete in at least three Saturday tournaments and third and fourth year students must compete in at least four Saturday tournaments. All students must assist in hosting the home tournament.

CREATIVE WRITING - This course is designed with students who are new to creative writing. This course may cover (but is not limited to) a variety of genres of writing like short stories, flash fiction, poetry, screenplays, and character sketches. There will be a reading portion included in this course for the purpose of familiarizing students with examples of the different formats and genres of writing. All writing will be completed as an ongoing process, with many opportunities to peer review and share products with others through reading events. In addition, students will end the semester by creating a portfolio of works that demonstrate their best work and their growth as writers. This course may be taken a total of two times.

GRAPHIC NOVEL - This elective is designed for students who enjoy reading and who want to experiment with the graphic novel. Possible genres may include (but are not limited to) historical fiction, realistic fiction, science fiction, nonfiction, etc. Students will explore new genres, and have the opportunity to read, discuss and actively engage in the art of the graphic novel.

YOUNG ADULT LITERATURE - This elective is designed for students who enjoy reading and who want to experiment with young adult literature. Possible genres may include (but are not limited to) realistic fiction, fantasy, science fiction, historical fiction, nonfiction, and poetry and verse novels. Students will explore new genres, and have the opportunity to read, discuss, and actively engage in young adult literature.

THE JOURNEY FROM FICTION TO FILM-This elective is designed for students who enjoy reading and want to experiment with studying written works and the film adaptations of those written works. Possible genres include realistic fiction, fantasy, science fiction, historical fiction, nonfiction, and short stories. Students will explore new genres and have the opportunity to read, discuss, compare, and actively engage in analyzing the journey that written works go through on their way from fiction to film.

ADVANCED LEADERSHIP - This class will build upon the leadership theories, concepts, and skills learned and practiced in Intro to Leadership. This traditional approach to learning is extended into application of each lesson topic through service learning experiences specifically designed to positively affect the school's culture and climate, physical campus experience, as well as stakeholder trust and morale. Students will practice a variety of writing, speaking, and presenting tasks. They will create mission and vision statements and measures of accountability for student leadership. They will create positive public relations campaigns for their school and will explore advocacy and the most effective ways to raise awareness for a worthy cause.

COLLEGE SPEECH (NCCC) - This is a basic course designed to prepare students to communicate effectively in both private and public speaking situations. Emphasis is given to fundamentals of communication as well as composition, organization, and delivery of speech presentation.

## Practical Arts/Career Pathways

In order to be named a pathway completer a student must earn three credits of CTE courses in the same state approved pathway earning an industry recognized, comprehensive certification or pass a third-party, end-of-pathway assessment.

Career Cluster - Agriculture, Food and Natural Resources

| Comprehensive Agriculture Science Pathway |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Course | Course <br> Number | Grade | Credit | Prerequisites |
| Introductory Level | AG110 | $9,10,11,12$ | 1 |  |
| Intro to Agriculture | AG250 | $10,11,12$ | 1 | Intro to Agriculture or instructor <br> permission |
| Technical Level | AG111 | $10,11,12$ | 1 | Intro to Agriculture or instructor <br> permission |
| Plant and Animal Science <br> This course alternates every other year. | COL650 | $10,11,12$ | 1 | Contact the college/career counselor for <br> requirements |
| Horticulture <br> This course alternates every other year. | AG425 |  | 12 | 1 | | Two Pathway Credits |
| :--- |
| and Instructor Permission |

None of the courses listed below meet graduation requirements for science.
INTRO TO AGRICULTURE - Agriscience addresses the full spectrum of the agricultural industry and introduces science as the basis for higher productivity and for the safest food system in the world. Students will gain knowledge about agricultural careers and opportunities. Students will also be introduced to the National FFA Organization where they will learn leadership skills through Agriculture Education. Students will learn skills such as organizing and conducting meetings, speaking in front of small groups, and record keeping. Each student will develop a Supervised Agricultural Experience project that will potentially earn them some income and awards. Students will have the opportunity to attend different leadership conferences and events.

PLANT AND ANIMAL SCIENCE (Will be offered in 2024-2025) - Plant \& Animal Science is for all students interested in agriculture and agribusiness. Areas covered will include animal science, crop science, horticulture, leadership, agribusiness, and ag-mechanics. Applied learning in biology and chemistry will emphasize plants, soils, and animals. Computer applications, basic shop skills, welding, and technology as it applies to agriculture will also be covered.

HORTICULTURE (Will be offered in 2023-2024) - The class covers basic horticulture science and practical cultural needs so that the student understands the fundamentals. The class also provides information on finding the right job in the horticulture industry and provides tips on interviewing. Students will learn plant nutrition and management, greenhouse skills, and marketing of plants. Students will have the opportunity to participate in Floriculture, Agronomy, Land \& Home site Evaluation, and Nursery \& Landscape Evaluation. Students will learn a variety of plants ranging from ornamental and landscape plants to grain crops and weeds.

ANIMAL SCIENCE - This class introduces the student to a variety of major and minor farm animal species, including such topics as breeds, marketing, feeding and management of the species and common diseases and parasites. Beyond discussion of the animals, the class takes a close look at career opportunities and job expectations in the field. The class
will also address very specific nutritional needs and feeding requirements of animals such as horses, ponies, goats, sheep, beef cattle, swine, rabbits, hens, ducks and more.

INTERNSHIP - A professional learning experience built upon the learning in the classroom, promoting the development of a broad range of transferable skills through a structured, work-related learning experience and include the on-going attention and support of an adult mentor.

| Power, Structural \& Technology Systems Pathway |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Course | Course <br> Number | Grade | Credit | Prerequisites |
| Introductory Level |  |  |  |  |
| Intro to Agriculture | AG110 | 9, 10, 11, 12 | 1 |  |
| Technical Level |  |  |  |  |
| Ag Welding I | AG217 | 10, 11, 12 | 0.5 | Intro to Agriculture/Intro to Welding |
| Application Level |  |  |  |  |
| Internship | AG425 | 12 | 1 | Two Pathway Credits and Instructor Permission |
| Agricultural Fabrication | AG400 | 11, 12 | 1 | Ag Welding 1 |
| Level I Welding (NCCC) | CO310 | 11, 12 | 3 | Contact the college/career counselor for requirements |

INTRO TO AGRICULTURE - Agriscience addresses the full spectrum of the agricultural industry and introduces science as the basis for higher productivity and for the safest food system in the world. Students will gain knowledge about agricultural careers and opportunities. Students will also be introduced to the National FFA Organization where they will learn leadership skills through Agriculture Education. Students will learn skills such as organizing and conducting meetings, speaking in front of small groups, and record keeping. Each student will develop a Supervised Agricultural Experience project that will potentially earn them some income and awards. Students will have the opportunity to attend different leadership conferences and events.

AGRICULTURAL WELDING I - Students will learn how to weld using the Arc, MIG, TIG and Oxy Acetylene equipment. Students will build a small project after they have mastered their basic welding skills. Students will also have the opportunity to design and cut out designs using the CNC Plasma Arc Cutter. The class will also cover the basic concepts of residential wiring. Students will demonstrate how to wire an electrical socket, light switch, and lights.

AGRICULTURAL FABRICATION - This course prepares students for entry-level positions in the Agriculture industry, specifically fabrication and welding. Students receive expanded experience in fabrication. Units of instruction are provided in gas welding, mig, brazing, arc and gas cutting and project layout. Also included is cost analysis, plan development and proper choice of materials. Teachers and projects will be used to assess student readiness needed in related occupations. Special emphasis for this class will be placed on work ethics, work quality and other job related skills. This course includes classroom instruction and lab work. This class will also cover the basic concepts of residential wiring. Students will demonstrate how to wire an electric socket, light switch and lights.

NCCC WELDING - LEVEL I - The Welding program allows students the opportunity to complete certificates at two levels and to transfer these certificates toward an Associate of Applied Science degree in Industrial Engineering Technology. The curriculum utilizes the American Welding Society's "Schools Excelling through National Skills Standards" (SENSE) which is a nationally-recognized credentialing and certification system. The Level I Welding certificate is for students who intend to seek entry-level employment after completing a one-year program of study.

Career Cluster - Architecture and Construction

| Construction and Design Pathway (Construction Strand) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Course | Course <br> Number | Grade | Credit |  |
| Introductory Level |  |  |  |  |
| Intro to Industrial Technology | IND111 | $9,10,11,12$ | 0.5 |  |
| Production Blueprint Reading | IND100 | $9,10,11,12$ | 0.5 |  |
| Drafting | IND116 | $9,10,11,12$ | 0.5 |  |
| Technical Level |  |  |  |  |
| Woodworking Principles | IN225 | $10,11,12$ | 1 | Drafting |
| Application Level |  |  |  |  |
| Furniture \& Cabinetry Fabrication | IN325 | 11,12 | 1 | Woodworking Principles |

Construction and Design Pathway (Design Strand)

| Course | Course <br> Number | Grade | Credit |  |
| :--- | :---: | :---: | :---: | :---: |
| Introductory Level |  |  |  |  |
| Intro to Industrial Technology | IND111 | $9,10,11,12$ | 0.5 |  |
| Production Blueprint Reading | IND100 | $9,10,11,12$ | 0.5 |  |
| Drafting | IND116 | $9,10,11,12$ | 0.5 |  |
| Technical Level | IN119 | $10,11,12$ | 1 | Drafting |
| Drafting (CAD) |  |  |  |  |
| Application Level | IN317 | 11,12 | 1 | Drafting (CAD) |
| Research \& Design in Pre-Construction | IN3 |  |  |  |

INTRO TO INDUSTRIAL TECH - An introductory level course designed to instruct students in the basic skills necessary to all occupations in the Construction, Manufacturing and Transportation career clusters.

PRODUCTION BLUEPRINT READING - This course provides students with the knowledge and ability to interpret the lines, symbols, and conventions of drafted blueprints. They generally emphasize interpreting, not producing, blueprints, although the courses may provide both types of experiences. Blueprint Reading courses typically use examples from a wide variety of industrial and technological applications.

DRAFTING - General course uses exercises from a variety of applications to provide students with the knowledge and experience to develop the ability to perform freehand sketching, lettering, geometric construction, and multiview projections and to produce various types of drawings (working, detail, assembly, schematic, perspective, and so on).

DRAFTING/ CAD- This course is offered as an intermediary step to more advanced drafting courses, CAD Design and Software courses introduce students to the computer-aided drafting systems available in the industry.

WOODWORKING PRINCIPLES - A comprehensive course designed to instruct students in the basic knowledge and skills required for cabinetmaking and furniture design.

RESEARCH \& DESIGN IN PRE-CONSTRUCTION - Advanced research and application course that covers specific topics in design \& pre-construction (drafting/architecture) to include management and "green design" skills

FURNITURE \& CABINETRY FABRICATION - An advanced level application course designed to provide students with experience in constructing cases, cabinets, counters, furniture and interior woodwork.

Career Cluster - Art, A/V and Communication

| Digital Media Pathway | Course |  |  |  |  | Course <br> Number | Grade | Credit |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
| Introductory Level | BU113 | $9,10,11,12$ | 1 |  |  |  |  |  |  |
| Computer Applications | BUS114 | $9,10,11,12$ | 0.5 |  |  |  |  |  |  |
| Business Essentials |  |  |  |  |  |  |  |  |  |
| Technical Level | JOU215 | $9,10,11,12$ | 0.5 |  |  |  |  |  |  |
| Photography | JOU213 | $9,10,11,12$ | 0.5 | Dual Enroll w/Graphic Design <br> Fundamentals or permission of instructor |  |  |  |  |  |
| 21st Century Journalism | JOU216 | $9,10,11,12$ | 0.5 | Dual Enroll w/21 ${ }^{\text {st }}$ Century Journalism |  |  |  |  |  |
| Graphic Design Fundamentals | BU219 | $9,10,11,12$ | 1 | Computer Applications |  |  |  |  |  |
| Graphic Design | BU300 | $10,11,12$ | 0.5 | Business Essentials |  |  |  |  |  |
| Sports and Entertainment Marketing | BU220 | $9,10,11,12$ | 0.5 | Computer Applications |  |  |  |  |  |
| Digital Marketing | JO312 | $9,10,11,12$ | 0.5 |  |  |  |  |  |  |
| Audio/Video Production Fundamentals |  |  |  |  |  |  |  |  |  |
| Application Level | JO316 | $10,11,12$ | 1 |  |  |  |  |  |  |
| Digital Media Design and Production | JO217 | 11,12 | 1 | Two Pathway Credits |  |  |  |  |  |
| and Instructor Permission |  |  |  |  |  |  |  |  |  |
| Digital Media Project Management | JO2 | BU250 | $10,11,12$ | 1 |  |  |  |  |  |

COMPUTER APPLICATIONS - This course is designed to help students move beyond the Google Platform. Students will thoroughly study Microsoft Word, Excel, Access and PowerPoint by creating professional documents that will help them throughout high school and beyond. Word activities could include flyers, business letters, formatting research papers, and resumes. Excel activities could include solving mathematical problems with formulas, creating and editing charts, and sorting data. PowerPoint activities could include creating presentations with appropriate text formatting, graphics and animation.

BUSINESS ESSENTIALS - This is a core course designed to give students an overview of the business, marketing and finance career cluster occupations. Students will develop an understanding of how academic skills in math, economics, and written and oral communications are integral components of success in these occupations. Students will examine current events to determine their impact on business and industry and legal and ethical behavior, acquire knowledge of safe and secure environmental controls to enhance productivity, determine how resources should be managed to achieve company goals, and identify employability and personal skills needed to obtain a career and be successful in the workplace. As students learn about the different types of business ownership, they will interpret industry laws and regulations to ensure compliance, identify principles of business management, and analyze business practices to determine ethics and social responsibilities.

PHOTOGRAPHY - Photo Imaging teaches the technical skills needed to produce quality images for use in a variety of applications. Topics include the use of equipment, software, and techniques to take, edit and manipulate digital images. It also introduces careers in photography as well as well-known photographers in history. Photos will be respectfully critiqued in order to improve photography skills. Meeting deadlines and working to the best of your ability is expected. Students will be required to produce a story roughly once a week.

21ST CENTURY JOURNALISM - 21st Century Journalism introduces students to the vast world of journalism. In this class, students will learn the technical skills to work as fully-capable, independent journalists who can find stories, find the appropriate sources, interview, photograph, write, edit, layout, and publish their own work. Sometimes they will work in teams, but most of the time they will work on their own projects. It is important for students in this class to be naturally inquisitive and be able to work independently. Students will be required to produce a story roughly once a week.

GRAPHIC DESIGN FUNDAMENTALS - Graphic Design Fundamentals provides a basic understanding of the graphic design process. Topics include analyzing the design elements and principles, exploring industry tools, software and equipment and learning composition techniques to develop a quality product. Students will be required to produce a story roughly once a week.

GRAPHIC DESIGN - Graphic Design courses emphasize design elements and principles in the purposeful arrangement of images and text to communicate a message. They focus on creating art products such as advertisements, product designs, and identity symbols. Graphic Design courses may investigate the computer's influence on and role in creating contemporary designs and provide a cultural and historical study of master design works of different periods and styles.

SPORTS/ENTERTAINMENT MARKETING - Sports and Entertainment Marketing focuses on marketing and management functions/tasks that can be applied in amateur or professional sports or sporting events, entertainment or entertainment events, selling or renting of supplies and equipment (other than vehicles) used for recreational or sporting purposes, products and services related to hobbies or cultural events, or businesses primarily engaged in satisfying the desire to make productive or enjoyable use of leisure time. Students in this class will be using marketing /business skills to enhance the Ottawa Sports Network Live Streaming Programming.

DIGITAL MARKETING - Digital Marketing covers the principles and functions of marketing from the standpoint of conducting business on the Internet. Typically, students develop these useful skills: using the Internet as a marketing tool, conducting a marketing analysis via the Internet, planning marketing support activities, managing an electronic marketing campaign, managing/owning a business via the Internet, and analyzing the impact of the Internet on global marketing.

AUDIO/VIDEO PRODUCTION FUNDAMENTALS - Audio Video Production Fundamentals provides a basic understanding of producing video for a variety of uses. Topics include analyzing the pre-production, production and post-production process, as well as explore the equipment, techniques, and software used to develop a quality video production. We will also discuss the use of music and graphics to help convey meaning and emotion in videos. Students will be required to produce a five to 10 -minute video each quarter with shorter projects happening every few weeks.

DIGITAL MEDIA DESIGN AND PRODUCTION - Digital Media Design and Production will provide students the opportunity to apply the fundamental techniques learned in 21st Century Journalism and Graphic Design Fundamentals through the production of a multimedia project - the school's yearbook, the Record - for public presentation. Students will collaborate with team members to design layouts for the yearbook, write and edit stories, record audio, take photographs, scan images into the computer, and sell ads. Students will be responsible for seeing all deadlines are met and that the yearbook is published on time. Some after-school and evening time may be required near the deadline time or to take photos at events. Students will be responsible for getting to events that are not held at the school.

DIGITAL MEDIA PROJECT MANAGEMENT - This class is for juniors and seniors on the staff of the Record. Students will work as the senior and secondary editors for the yearbook. Students will collaborate with team members in the Digital Media Production class to design layouts for the yearbook, write and edit stories, record audio, take photographs, scan images into the computer, and sell ads. Students will be responsible for seeing all deadlines are met and that the yearbook is published on time. Some after-school and evening time may be required near the deadline time or to take photos at events. Students will be responsible for getting to events that are not held at the school

VIDEO PRODUCTION - Video Production will take the skills learned in the design and technical courses and utilize them on a larger scale. From beginning to end, from idea to credit roll, the year will be spent on development,
pre-production, production and post-production. The final product will be included in the year-end showcase. Students will be required to produce a 30 -minute video each semester with shorter projects happening every few weeks. Students can choose to make one 60 -minute video for the year. They can either choose a documentary or a scripted, narrative film.

| Graphic Design Pathway | Course |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Course <br> Number | Grade | Credit |  |  |
| Introductory Level |  |  |  |  |
| Computer Applications | BU113 | $9,10,11,12$ | 1 |  |
| Technical Level | JOU215 | $9,10,11,12$ | 0.5 |  |
| Photography | JOU216 | $9,10,11,12$ | 0.5 |  |
| Graphic Design Fundamentals | BU219 | $9,10,11,12$ | 1 | Computer Applications |
| Graphic Design | BU218 | $9,10,11,12$ | 1 | Computer Applications |
| Computer Graphics | BU311 | $10,11,12$ | 1 | Two Pathway Credits <br> and Instructor Permission |
| Application Level |  |  |  |  |
| Media Technology Workplace <br> Experience |  |  |  |  |

COMPUTER APPLICATION - This course is designed to help students move beyond the Google Platform. Students will thoroughly study Microsoft Word, Excel, Access and PowerPoint by creating professional documents that will help them throughout high school and beyond. Word activities could include flyers, business letters, formatting research papers, and resumes. Excel activities could include solving mathematical problems with formulas, creating and editing charts, and sorting data. PowerPoint activities could include creating presentations with appropriate text formatting, graphics and animation.

PHOTOGRAPHY - This photography class consists of weekly in class and out of class photoshoots, learning about camera equipment and how it works and striving to take better photos by studying composition, lighting, focus, focal point and camera settings. It also introduces careers in photography as well as well known photographers in history. Photos will be analyzed in order to improve photography skills. Meeting deadlines and working to the best of your ability is expected. Personal access to a camera is not required, but can be helpful.

GRAPHIC DESIGN FUNDAMENTALS - Design Fundamentals will build off concepts learned in 21st Century Journalism. Topics include identifying the basics of composition, analyzing how images can convey messages, and demonstrating the ability to apply those concepts when producing designs. This course, along with 21 st Century Journalism, will prepare students to produce the school yearbook and newspaper.

GRAPHIC DESIGN - Graphic Design courses emphasize design elements and principles in the purposeful arrangement of images and text to communicate a message. They focus on creating art products such as advertisements, product designs, and identity symbols. Graphic Design courses may investigate the computer's influence on and role in creating contemporary designs and provide a cultural and historical study of master design works of different periods and styles.

COMPUTER GRAPHICS - Computer Graphics provides students with the opportunity to create 3-D visual imagery and apply graphic techniques to various fields, such as advertising, TV/Video, and architecture. Typical course topics include modeling, simulation, and animation. Students will primarily use Blender software. Most lessons are taught via YouTube, so students need to be self-driven and manage time to complete assignments.

MEDIA TECHNOLOGY WORKPLACE EXPERIENCE - Visual artists create art to communicate ideas, thoughts and feelings. They use a number of methods and programs.Photoshop and Illustrator are the main programs used in this class. The works produced may be realistic, stylized or abstract and may depict objects, people, nature, events, and many other subjects. Illustrators and graphic designers in this class can and will provide services to the school and commercial clients.

## Career Cluster - Education and Training

| Teaching/Training Pathway | Course |  |  |  |  | Course <br> Number | Grade | Credit |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Introductory Level |  |  |  | Prerequisites |  |  |  |  |  |
| Career and Life Planning | FAC115 | $9,10,11,12$ | 0.5 |  |  |  |  |  |  |
| Technical Level |  |  |  |  |  |  |  |  |  |
| Human Growth Dev.-The Early Years | FAC123 | $9,10,11,12$ | 0.5 | Must dual enroll in Family Studies |  |  |  |  |  |
| Family Studies | FAC124 | $9,10,11,12$ | 0.5 | Must dual enroll in HGD-Early Years |  |  |  |  |  |
| Lifespan Development | FA300 | $9,10,11,12$ | 0.5 |  |  |  |  |  |  |
| Teaching as a Career | ET100 | $10,11,12$ | 1 |  |  |  |  |  |  |
| Application Level |  |  |  |  |  |  |  |  |  |
| Teaching Internship | ET120 | 11,12 | 1 | Two Pathway Credits <br> and Instructor Permission |  |  |  |  |  |

CAREER AND LIFE PLANNING - Self-management course introduced students to the skills and strategies helpful in becoming more focused productive individuals. These courses typically emphasize goal-setting; decision-making; managing time, energy, and stress; and identifying alternatives and coping strategies. Students will also explore various careers and investigate a range of academic, communication and technical skills in all aspects of the identified clusters.

HUMAN GROWTH DEV-THE EARLY YEARS - The Early Years provides students with knowledge about the physical, intellectual, emotional, and social growth (PIES) and development of children. Course content will provide an overview of life stages from prenatal and birth processes and fundamentals of children's milestone development during the early years.

FAMILY STUDIES - The Family Studies course explores the roles and responsibilities of parents such as how society, media, technology and diversity impact their ability to balance work and family. It also includes the development of children and parents as their earliest teacher. Parenting styles and family stages are explored as is the changing demographics which will change the face of the US family. Parenting and behavior guidance skills are strengthened through a study of positive family relationships, child abuse and neglect, safety, and health practices. Occupations related to meeting the needs of families will be analyzed. This course will promote the creation of healthy and sustainable families be they their own or those they work with.

LIFESPAN DEVELOPMENT - Life Span Development prepares students for occupations associated with meeting the needs of people by learning about physical, intellectual, emotional and social development from childhood to death. In addition, this course helps students discover how individuals respond to the various stages of the life span with a strong tie to teen years, adulthood and later years.

TEACHING AS A CAREER - Teaching Profession courses introduce students to the principles underlying teaching and learning, the responsibilities of teachers, and the techniques of imparting knowledge and information. These courses typically expose students to and train them in classroom management, student behavior, leadership and human relations skills, assessment of student progress, teaching strategies, and various career opportunities in the field of education.

TEACHING INTERNSHIP - Educational methodology courses prepare students to teach and guide others. These courses typically provide opportunities for students to develop their own teaching objectives, design lesson plans, and experience teaching in a controlled environment. Students practice teaching strategies, learning styles, time management and planning strategies, presentation and questioning skills, classroom management, and evaluation techniques.

## Career Cluster- Business Management and Administration

| Business Management and Entrepreneurship Pathway |  |  |  |  |
| :--- | :--- | ---: | ---: | :--- |
| Course | Course <br> Number | Grade | Credit |  |
| Introductory Level |  |  |  |  |
| Business Essentials | BUS114 | $9,10,11,12$ | 0.5 |  |
| Technical Level |  |  |  |  |
| Business Communication | BU221 | $9,10,11,12$ | 0.5 | Business Essentials |
| Entrepreneurship | BUS115 | $9,10,11,12$ | 0.5 |  |
| Accounting | BUS213 | $10,11,12$ | 1 |  |
| Principles of Marketing | BUS216 | $10,11,12$ | 1 | Business Essentials |
| Web Page Design | BU217 | $9,10,11,12$ | 1 |  |
| Computer Graphics | BU218 | $9,10,11,12$ | 0.5 |  |
| Culinary Essentials | FAC120 | $9,10,11,12$ | 0.5 |  |
| AG Welding 1 | AG217 | $10,11,12$ | 1 |  |
| Drafting/CAD | IN119 | $10,11,12$ | 1 |  |
| Digital Marketing | BU220 | $9,10,11,12$ | 0.5 |  |
| Application Level |  |  |  |  |
| Applied Business Development | BU330 | 11,12 | 1 | Two Pathway Credits |
|  |  |  |  | and Instructor Permission |

BUSINESS ESSENTIALS - This is a core course designed to give students an overview of the business, marketing and finance career cluster occupations. Students will develop an understanding of how academic skills in math, economics, and written and oral communications are integral components of success in these occupations. Students will examine current events to determine their impact on business and industry and legal and ethical behavior, acquire knowledge of safe and secure environmental controls to enhance productivity, determine how resources should be managed to achieve company goals, and identify employability and personal skills needed to obtain a career and be successful in the workplace. As students learn about the different types of business ownership, they will interpret industry laws and regulations to ensure compliance, identify principles of business management, and analyze business practices to determine ethics and social responsibilities.

BUSINESS COMMUNICATION - This course helps students develop an understanding and appreciation for effective communication in business situations and environments. Emphasis is placed on all phases of communication: speaking, listening, thinking, responding, reading, writing, communicating nonverbally, and utilizing technology for communication. Business communication functions, processes, and applications in the context of business may be practiced through problem-based projects and real-world applications

ENTREPRENEURSHIP - Entrepreneurship courses acquaint students with the knowledge and skills necessary to own and operate their own businesses or the ability to use the entrepreneurial mindset in an existing operation. Topics from several fields typically form the course content: economics, marketing principles, human relations and psychology, business and labor law, legal rights and responsibilities of ownership, business and financial planning, finance and accounting, and communication.

ACCOUNTING 1 - Accounting courses introduce and expand upon the fundamental accounting principles and procedures used in businesses. Course content typically includes the full accounting cycle, payroll, taxes, debts, depreciation,ledger and journal techniques, and periodic adjustments. Students may learn how to apply standard auditing principles and prepare budgets and final reports. Calculators, electronic spreadsheets, or other automated tools are usually used. Advanced topics may include elementary principles of partnership and corporate accounting and the managerial uses of control systems and the accounting process.

PRINCIPLES OF MARKETING - Principles of Marketing courses offer students insight into the processes affecting the flow of goods and services from the producer to the consumer. Course content ranges considerably as general marketing principles such as purchasing, distribution, and sales are covered; however, a major emphasis is often placed on kinds of markets; market identification; product planning, packaging and pricing; and business management.

WEB PAGE DESIGN - The purpose of this course is to learn how to create web pages from the ground up. Students will learn how to write code with HTML and use some drag and drop software. Each student will create many websites to demonstrate their competence with software and internal languages.

COMPUTER GRAPHICS - Computer Graphics provides students with the opportunity to create 3-D visual imagery and apply graphic techniques to various fields, such as advertising, TV/Video, and architecture. Typical course topics include modeling, simulation, and animation. Students will primarily use Blender software. Most lessons are taught via YouTube, so students need to be self-driven and manage time to complete assignments.

CULINARY ESSENTIALS - Culinary Essentials will give students a thorough overview of the foodservice portion of the overall hospitality and tourism industry. Students will experience dry, moist and combination heat cooking methods, cold food production, basic baking techniques and career opportunities in the hospitality and tourism industry.

AGRICULTURAL WELDING I - Students will learn how to weld using the Arc, MIG, TIG and Oxy Acetylene equipment. Students will build a small project after they have mastered their basic welding skills. Students will also have the opportunity to design and cut out designs using the CNC Plasma Arc Cutter. The class will also cover the basic concepts of residential wiring. Students will demonstrate how to wire an electrical socket, light switch, and lights.

DRAFTING/ CAD - This course is offered as an intermediary step to more advanced drafting courses, CAD Design and Software courses introduce students to the computer-aided drafting systems available in the industry.

DIGITAL MARKETING - Digital Marketing covers the principles and functions of marketing from the standpoint of conducting business on the Internet. Typically, students develop these useful skills: using the Internet as a marketing tool, conducting a marketing analysis via the Internet, planning marketing support activities, managing an electronic marketing campaign, managing/owning a business via the Internet, and analyzing the impact of the Internet on global marketing.

APPLIED BUSINESS DEVELOPMENT - This course allows for students to practice skills of planning,organizing, directing and controlling functions of operating a business while assuming the responsibilities and risk involved. Students will develop skills in enterprise development, market analysis and financial preparation.

## Career Cluster-Engineering

| Energy Pathway | Course |  |  |  |  | Course <br> Number | Grade | Credit |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Introductory Level | ER100 | $9,10,11,12$ | 0.5 |  |  |  |  |  |  |
| Introduction to Energy | ER110 | $9,10,11,12$ | 0.5 |  |  |  |  |  |  |
| Introduction to Environmental Science | ER120 | $10,11,12$ | 1 | Intro to Energy |  |  |  |  |  |
| Technical Level | ER120 |  |  |  |  |  |  |  |  |
| Energy Industry Fundamentals (not <br> available until 2025-2026) | ER130 | 11,12 | 1 | Two Pathway Credits <br> and Instructor Permission |  |  |  |  |  |
| Application Level |  |  |  |  |  |  |  |  |  |
| Research and Development for Energy <br> (not available until 2026-2027) | ER2 |  |  |  |  |  |  |  |  |

INTRODUCTION TO ENERGY - An introductory level course designed to teach students about the occupations in the Energy field and the skills required for those occupations.

INTRODUCTION TO ENVIRONMENTAL SCIENCE - An introductory level course designed to teach students about the concepts of our environment.

ENERGY INDUSTRY FUNDAMENTALS - Energy Industry Fundamentals provides a broad understanding of the electric and natural gas utility industry and the energy generation, transmission, and distribution infrastructure. The course includes business models, regulations, types of energy and their conversion to usable energy such as electric power, emerging technologies, how generated power is transmitted and distributed to the point of use, and the connection to careers in the energy industry. This class will not be available until 2025-2026.

RESEARCH AND DEVELOPMENT FOR ENERGY - An application level course which allows more in-depth student research projects and/or workplace/internship experience related to the field of Energy. This class will not be available until 2026-2027.

## Engineering and Applied Mathematics Pathway

| Course | Course <br> Number | Grade | Credit |  |
| :--- | :--- | :--- | :--- | :--- |
| Introductory Level |  |  |  | Prerequisites |
| Chemistry | SC213 | 11,12 | 1 | Concurrent enrollment or successful <br> completion of Algebra 2 |
| Production Blueprint Reading | IND100 | $9,10,11,12$ | 0.5 |  |
| Introduction to Engineering | ST100 | $9,10,11,12$ | 1 |  |
| Technical Level | IN119 | $10,11,12$ | 1 | Drafting |
| Drafting/CAD | ST300 | $9,10,11,12$ | 1 |  |
| Robotics | AV117 | 11,12 | 1 | Two Pathway Credits <br> and Instructor Permission |
| Application Level |  |  |  |  |
| Workplace Experience in Engineering <br> (not available until 2025-2026) |  |  |  |  |

CHEMISTRY - Concepts that will be covered include:the metric system, problem solving, the periodic table, dimensional analysis, the mole concept, naming of chemical compounds, and chemical reactions. Students who take this course should have strong math and reading skills and should be able to acquire new skills/concepts quickly. Students who intend to take Chemistry as a sophomore must enroll in and pass Advanced Physical Science with a C or higher grade in their freshmen year, beginning with the class of 2022.

PRODUCTION BLUEPRINT READING - This course provides students with the knowledge and ability to interpret the lines, symbols, and conventions of drafted blueprints. They generally emphasize interpreting, not producing, blueprints, although the courses may provide both types of experiences. Blueprint Reading courses typically use examples from a wide variety of industrial and technological applications.

INTRODUCTION TO ENGINEERING - An Introductory level course designed to introduce students to concepts in Engineering with a focus on Science, Technology, Engineering, \& Math; including units on safety and tools, computer use, design, automation, robotics, space, flight, and electricity.

DRAFTING/ CAD - This course is offered as an intermediary step to more advanced drafting courses, CAD Design and Software courses introduce students to the computer-aided drafting systems available in the industry.

ROBOTICS - Robotics courses develop and expand students' skills and knowledge so that they can design and develop robotic devices. Topics covered in the course may include mechanics, electrical and motor controls, pneumatics, computer basics, and programmable logic controllers.

WORKPLACE EXPERIENCE IN ENGINEERING - Digital Electronics courses teach students how to use applied logic in the development of electronic circuits and devices. Students may use computer simulation software to design and test digital circuitry prior to the actual construction of circuits and devices. This class will not be available until 2025-2026.

Career Cluster - Finance

| Business Finance Pathway | Course |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Course <br> Number | Grade | Credit |  |
| Introductory Level |  |  |  |  |
| Business Essentials | BU114 | $9,10,11,12$ | 0.5 |  |
| Technical Level |  |  |  |  |
| Business Communication | BU221 | $9,10,11,12$ | 0.5 |  |
| Accounting I | BU213 | $10,11,12$ | 1 |  |
| Entrepreneurship | BUS115 | $9,10,11,12$ | 0.5 |  |
| Application Level | BU392 | 11,12 | 1 | Accounting I |
| Advanced Accounting | BUS312 | 11,12 | 0.5 |  |
| Banking and Finance | BUS312 | 11,12 | 0.5 |  |
| Investing | COL535 | 11,12 | 1 | Contact the college/career counselor for <br> requirements |
| College Accounting | BU400 | 12 | 1 | Two Pathway Credits <br> and Instructor Permission |
| Finance-Workplace Experience |  |  |  |  |

BUSINESS ESSENTIALS - This is a core course designed to give students an overview of the business, marketing and finance career cluster occupations. Students will develop an understanding of how academic skills in math, economics, and written and oral communications are integral components of success in these occupations. Students will examine current events to determine their impact on business and industry and legal and ethical behavior, acquire knowledge of safe and secure environmental controls to enhance productivity, determine how resources should be managed to achieve company goals, and identify employability and personal skills needed to obtain a career and be successful in the workplace. As students learn about the different types of business ownership, they will interpret industry laws and regulations to ensure compliance, identify principles of business management, and analyze business practices to determine ethics and social responsibilities.

BUSINESS COMMUNICATION - This course helps students develop an understanding and appreciation for effective communication in business situations and environments. Emphasis is placed on all phases of communication: speaking, listening, thinking, responding, reading, writing, communicating nonverbally, and utilizing technology for communication. Business communication functions, processes, and applications in the context of business may be practiced through problem-based projects and real-world applications

ACCOUNTING 1 - Accounting courses introduce and expand upon the fundamental accounting principles and procedures used in businesses. Course content typically includes the full accounting cycle, payroll, taxes, debts, depreciation,ledger and journal techniques, and periodic adjustments. Students may learn how to apply standard auditing principles and prepare budgets and final reports. Calculators, electronic spreadsheets, or other automated tools are usually used. Advanced topics may include elementary principles of partnership and corporate accounting and the managerial uses of control systems and the accounting process.

ENTREPRENEURSHIP - Entrepreneurship courses acquaint students with the knowledge and skills necessary to own and operate their own businesses or the ability to use the entrepreneurial mindset in an existing operation. Topics from several fields typically form the course content: economics, marketing principles, human relations and psychology,
business and labor law, legal rights and responsibilities of ownership, business and financial planning, finance and accounting, and communication.

ADVANCED ACCOUNTING - This course will expand upon the foundational accounting principles and procedures used in business. Course content will include the full accounting cycle, payroll, taxes, debts, depreciation, ledger and journal techniques, and periodic adjustments. Students learn how to apply standard auditing principles and to prepare budgets and final reports. Calculators, electronic spreadsheets and other automated tools are usually used. Topics may include elementary principles of partnership and corporate accounting, the managerial uses of control systems and the accounting process, and further enhancement of accounting skills.

BANKING AND FINANCE - Banking and Finance courses provide students with an overview of the American monetary and banking system as well as types of financial institutions and the services and products that they offer. Course content may include government regulations; checking, savings, and money market accounts; loans; investments; and negotiable instruments.

INVESTING - Investing courses emphasize the formulation of business and individual investment decisions by comparing and contrasting the investment qualities of cash, stock, bonds, and mutual funds. Students typically review annual reports, predict growth rates, and analyze trends. Stock market simulations are often incorporated into investing courses.

COLLEGE ACCOUNTING (NCCC) - Basic accounting principles and procedures, the accounting cycle, and the records necessary in maintaining an accounting system for a small business organized as a sole proprietorship are surveyed in this course. The course is an introductory course with no prerequisite.

FINANCE-WORKPLACE EXPERIENCE - Workplace Experience courses provide students with work experience in fields related to finance. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace. Comprehensive - Students are able to take Finance Workplace Experience as a year-long course for a more in-depth study of the financial industry.

Career Cluster - Health and Bio Sciences

| Health Science Pathway |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Course | Course <br> Number | Grade | Credit | Prerequisites |
| Introductory Level |  |  |  |  |
| Biology | SC110 | 9, 10 | 1 |  |
| Chemistry | SC213 | 10, 11, 12 | 1 |  |
| Intro to Health Care | FAC400 | 9, 10, 11, 12 | 0.5 |  |
| Technical Level |  |  |  |  |
| Nutrition \& Wellness | FAC125 | 9, 10, 11, 12 | 0.5 |  |
| Anatomy and Physiology | SC350 | 11, 12 | 1 | Biology |
| Pharmacology (NCCC) | COL324 | 10,11, 12 | 0.5 | Contact the college/career counselor for requirements |
| Medical Terminology (NCCC) | COL325 | 10,11, 12 | 0.5 |  |
| Emergency Medical Tech (NCCC) | COL700 | 12 | 1 |  |
| Health Information Technology (HIT)(NCCC) | COL 326 | 10,11, 12 | 0.5 |  |
| Application Level |  |  |  |  |
| Health Care Work Experience | FA425 | 12 | 1 | Two Pathway Credits and Instructor Permission |
| Pharmacy Technician (ACCC) | COL330 | 10,11, 12 | 0.5 | Contact the college/career counselor for requirements |
| Certified Nurse Aide (NCCC) | COL323 | 11, 12 | 1 |  |
| Certified Medication Aide (NCCC) | COL323 | 12 | 0.5 |  |

BIOLOGY - Biology is an introductory course for students that will teach the basics of life science and laboratory techniques. This course is designed to cover all aspects of NGSS:Molecules to Organisms, Heredity, Ecosystems, and Biological Evolution. Coursework, lab work, projects, and assessments will prepare students for future science courses.

CHEMISTRY - Concepts that will be covered include:the metric system, problem solving, the periodic table, dimensional analysis, the mole concept, naming of chemical compounds, and chemical reactions. Students who take this course should have strong math and reading skills and should be able to acquire new skills/concepts quickly. Students who intend to take Chemistry as a sophomore must enroll in and pass Advanced Physical Science with a C or higher grade in their freshmen year.

INTRO TO HEALTH CARE - This course provides students with the basic knowledge of health/wellness professionals in private business and industry, community organizations, and health care settings, as well as job opportunities, wage, and duties. This class includes instruction in personal health, community health and welfare, nutrition, epidemiology, disease prevention, fitness and exercise, and health behaviors that are associated with various health careers. This course is required for pathway approval.

NUTRITION \& WELLNESS - Health and life management courses focus as much on consumer education topics (such as money management and evaluation of consumer information and advertising) as on personal health topics (such as nutrition, stress management, drug/alcohol abuse prevention, disease prevention, and first aid). Course objectives include helping students develop decision-making, communication, interpersonal, and coping skills and strategies.

ANATOMY AND PHYSIOLOGY - This course is taught in our science department and was formally called Anatomy \& Physiology. See the course description in science.

PHARMACOLOGY - Pharmacology courses involve a study of how humans can be changed by chemical substances, especially the actions of drugs and other substances used to treat disease. Basic concepts of physiology, pathology, biochemistry, and bacteriology are typically brought into play as students examine the effects of drugs and their mechanisms of action.

MEDICAL TERMINOLOGY - This course provides the student with the basic tools for building a medical vocabulary. It emphasizes the building of medical terms from prefixes, suffixes, word roots and combining forms. Emphasis is also placed on correct pronunciation, spelling, and analysis of medical terms as they pertain to anatomy, physiology, and diseases.

EMERGENCY MEDICAL TECH (EMT) - EMTs are clinicians, trained to respond quickly to emergency situations regarding medical issues, traumatic injuries and accident scenes. This class is designed to provide skills and knowledge necessary to sit for the EMT certification test. The class is taught by a certified EMT instructor and follows competencies set forth by the certifying agency.

HEALTH INFORMATION TECHNOLOGY (HIT) - This course introduces and prepares students to perform credentialing, privileging, personnel management, and accreditation compliance services for hospitals and other health care facilities and organizations. Includes basic instruction in medical staff organization and management, medical terminology, credentialing and recredentialing, healthcare accreditation and regulatory standards, health care law, meeting and negotiation management and office information systems management.

HEALTH CARE WORK EXPERIENCE - Health Career Workplace Experience provides students with Professional Learning Experiences (PLE) to gain extensive knowledge of health/wellness professionals in private/public industry, community organizations, and health care settings, as well as job opportunities, wage, and duties. Students will gain extensive knowledge in selected areas of health care, specific occupations, skills sets, educational requirements, credentials/licensure, and daily routines by participating in Job Shadows or Internships. This class includes instruction in specific skill sets related to health occupations, research on emerging trends, exploration of daily routines, understanding code of ethics, patient rights, standards and regulations, safety, and legal requirements. Collaboration with local healthcare professionals, organizations and businesses are highly encouraged to offer PLE with documentation of the student experience.

PHARMACY TECHNICIAN - This course will help students learn the information needed to start a career as a Pharmacy Technician. Course content will include an understanding of the role of the pharmacy profession, pharmacy procedures and safety, drug interactions and reactions, an overview of various drug categories, pharmacy law and ethical responsibilities, and a pharmacy technician practicum. These standards will prepare the student for a technical assessment directly aligned to the standards.

NCCC CERTIFIED NURSE AIDE - The Certified Nurse Aide or CNA is a 90-hour course designed for individuals seeking an entry-level position in the area of adult healthcare. This course includes a study of the aging process and its related conditions and the nursing skills required in assisting geriatric residents to reach and maintain their highest level of wellness consistent with the limitations imposed by the aging process. This ninety (90) clock hour course includes forty-five (45) hours of theory and twenty-five (25) hours of supervised clinical experience in a nursing home and twenty (20) hours of lab. This course prepares students for the Certified Nurse Aide Exam. Students cannot take the exam until he/she is 18 years of age.

NCCC CERTIFIED MEDICATION AIDE - The medication aide certificate is valid for two years from the date issued. To maintain a valid certificate, you must complete, at any time during those two years, a program of 10 hours of continuing education approved by the certifying agency. Students must be 18 years old to take the state exam and meet reading placement requirements. See college coordinator for requirements before enrolling for the class.

| Restaurant and Event Management Pathway (Event Planning Strand) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Course | Course <br> Number | Grade | Credit |  |
| Introductory Level |  |  |  |  |
| Career \& Life Planning | FAC115 | $9,10,11,12$ | 0.5 |  |
| Business Essentials | BUS114 | $9,10,11,12$ | 0.5 |  |
| Technical Level | FAC120 | $9,10,11,12$ | 0.5 |  |
| Culinary Essentials | FAC125 | $9,10,11,12$ | 0.5 |  |
| Nutrition \& Wellness | FAC214 | $10,11,12$ | 0.5 | Culinary Essentials <br> Class Offered Alternating Years |
| Foundation of Travel and Tourism | FAC121 | $10,11,12$ | 0.5 | Culinary Essentials <br> Class Offered Alternating Years |
| Event Planning and Management |  |  |  | Two Pathway Credits <br> and Instructor Permission |
| Application Level | BU330 | 11,12 | 1 |  |
| Applied Business Development |  |  |  |  |

Restaurant and Event Management Pathway (Culinary Arts Strand)

| Course | Course <br> Number | Grade | Credit |  |
| :--- | :--- | ---: | ---: | :--- |
| Introductory Level |  |  |  |  |
| Pareer \& Life Planning | FAC115 | $9,10,11,12$ | 0.5 |  |
| Business Essentials | BUS114 | $9,10,11,12$ | 0.5 |  |
| Technical Level |  |  |  |  |
| Culinary Essentials | FAC120 | $9,10,11,12$ | 0.5 |  |
| Nutrition \& Wellness | FAC125 | $9,10,11,12$ | 0.5 |  |
| Event Planning and Management | FAC121 | $9,10,11,12$ | 0.5 | Culinary Essentials |
| Culinary Arts I | FA213 | $10,11,12$ | 1 | Culinary Essentials |
| Culinary Arts II | FAC312 | 11,12 | 0.5 | Culinary Arts I |
| Baking/Pastry I | FAC318 | $9,10,11,12$ | 0.5 | Culinary Essentials |
| Application Level | FA351 | 11,12 | 1 | Two Pathway Credits <br> and Instructor Permission |
| Culinary Applications |  |  |  |  |

CAREER AND LIFE PLANNING - Self-management course introduced students to the skills and strategies helpful in becoming more focused productive individuals. These courses typically emphasize goal-setting; decision-making; managing time, energy, and stress; and identifying alternatives and coping strategies. Students will also explore various careers and investigate a range of academic, communication and technical skills in all aspects of the identified clusters.

BUSINESS ESSENTIALS - This is a core course designed to give students an overview of the business, marketing and finance career cluster occupations. Students will develop an understanding of how academic skills in math, economics, and written and oral communications are integral components of success in these occupations. Students will examine current events to determine their impact on business and industry and legal and ethical behavior, acquire knowledge of safe and secure environmental controls to enhance productivity, determine how resources should be managed to achieve company goals, and identify employability and personal skills needed to obtain a career and be successful in the workplace. As students learn about the different types of business ownership, they will interpret industry laws and regulations to ensure compliance, identify principles of business management, and analyze business practices to determine ethics and social responsibilities.

CULINARY ESSENTIALS - Culinary Essentials will give students a thorough overview of the foodservice portion of the overall hospitality and tourism industry. Students will experience dry, moist and combination heat cooking methods, cold food production, basic baking techniques and career opportunities in the hospitality and tourism industry.

NUTRITION \& WELLNESS - Health and life management courses focus as much on consumer education topics (such as money management and evaluation of consumer information and advertising) as on personal health topics (such as nutrition, stress management, drug/alcohol abuse prevention, disease prevention, and first aid). Course objectives include helping students develop decision-making, communication, interpersonal, and coping skills and strategies.

EVENT PLANNING \& MANAGEMENT (Offered in 2023-2024) - This course provides students with the knowledge and skills related to the event planning and implementation process. It will include establishing client relationships, the importance of communication, planning process, resource management, quality service and staffing issues.

FOUNDATIONS OF TRAVEL AND TOURISM (Offered in 2024-2025) - This course will assist students in charting a career path in one of the world's largest industries...travel and tourism. It will look at the different segments of the tourism industry and explore careers that the industry offers. It looks at the economic impact and the ramifications of development to the economy. Students will also explore emerging trends and the impact of technology.

CULINARY ARTS I - This course integrates the knowledge, skills and practices required for careers in the restaurant industry. Topics include the sources, symptoms and prevention measures for common food illnesses, meal management, correct use of food production equipment and production and facility management principles. Students will also begin to develop culinary skills for a variety of food products.

CULINARY ARTS II - This course will continue to build on the Culinary Arts I course by expanding student knowledge, skills and practices. Whereas Culinary Arts I focused on beginning culinary skill development, Culinary Arts II expands those skills as well as adds topics such as event management, internal and external customer service and working with special dietary needs.

BAKING/PASTRY I - This course looks at the baking and pastry industry, and the equipment and procedures required. Topics include baking science, ingredient function and methods used for a quality product based upon industry standards.

APPLIED BUSINESS DEVELOPMENT - This course allows students to practice skills of planning, organizing, directing, and controlling functions of operating a business while assuming the responsibilities and risks involved. Students will develop enterprise development, market analysis, and financial preparation skills.

CULINARY APPLICATIONS - This course applies the skills needed in the culinary arts profession. It includes the application of skills within a school-based, community-based experience or work-based internship and will cover an introduction of all aspects of an industry. Students enrolled in this course are expected to have mastered skills in the culinary field so that they are able to apply them in authentic experiences following industry standards and regulations. Local prerequisites apply

## Career Cluster - Human Services

| Early Childhood Development and Services Pathway |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Course | Course <br> Number | Grade | Credit |  |
| Introductory Level |  |  |  |  |
| Career \& Life Planning | FAC115 | $9,10,11,12$ | 0.5 |  |
| Technical Level |  |  |  |  |
| HGD.-The Early Years | FAC123 | $9,10,11,12$ | 0.5 | Must enroll in Family Studies too |
| Family Studies | FAC124 | $9,10,11,12$ | 0.5 | Must enroll in HGD-Early Years too |
| Foundations of Early Childhood Dev. | FA217 | $10,11,12$ | 1 | HGD-Early Years and Family Studies |
| Application Level | FA317 | 11,12 | 1 | Two Pathway Credits <br> and Instructor Permission |
| Early Childhood Application |  |  |  |  |

CAREER AND LIFE PLANNING - Self-management course introduced students to the skills and strategies helpful in becoming more focused productive individuals. These courses typically emphasize goal-setting; decision-making; managing time, energy, and stress; and identifying alternatives and coping strategies. Students will also explore various careers and investigate a range of academic, communication and technical skills in all aspects of the identified clusters.

HUMAN GROWTH \& DEVELOPMENT (HGD EARLY YEARS - Years provides students with knowledge about the physical, intellectual, emotional, and social growth (PIES) and development of children. Course content will provide an overview of life stages from prenatal and birth processes and fundamentals of children's milestone development during the early years.

FAMILY STUDIES - The Family Studies course explores the roles and responsibilities of parents such as how society, media, technology and diversity impact their ability to balance work and family. It also includes the development of children and parents as their earliest teacher. Parenting styles and family stages are explored as is the changing demographics which will change the face of the US family. Parenting and behavior guidance skills are strengthened through a study of positive family relationships, child abuse and neglect, safety, and health practices. Occupations related to meeting the needs of families will be analyzed. This course will promote the creation of healthy and sustainable families be they their own or those they work with.

FOUNDATIONS OF EARLY CHILDHOOD - This technical level class provides students with knowledge about the physical, mental and social growth and development of children from conception to elementary age, emphasizing the application of this knowledge in childcare settings. These courses typically include related topics such as the appropriate care of infants, toddlers, and young children. Career development will include such topics as communication, human relation skills, decision making skills, work ethics, identified 21st century skills.

EARLY CHILDHOOD APPLICATION - Workplace experience courses provide students with work experience in fields related to caring for others. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). At OHS, CT PreSchool serves as the agency where students get hands-on experience in a workplace setting. These courses may include classroom activities involving further study of the field or discussion regarding experiences that students encounter in the workplace that relate to careers in education, early childhood education, and human services.

Family and Community Services Pathway

| Course | Course <br> Number | Grade | Credit | Prerequisites |
| :--- | :--- | :--- | :--- | :--- |
| Introductory Level | FAC115 | $9,10,11,12$ | 0.5 |  |
| Career \& Life Planning |  |  |  |  |
| Technical Level | FAC120 | $9,10,11,12$ | 0.5 |  |
| Culinary Essentials | FAC123 | $9,10,11,12$ | 0.5 |  |
| HGD.-The Early Years | FAC125 | $9,10,11,12$ | 0.5 |  |
| Family Studies | FAC200 | $9,10,11,12$ | 0.5 |  |
| Nutrition \& Wellness | FA300 | $9,10,11,12$ | 0.5 |  |
| Leadership Service in Action | FA500 |  | 11,12 | 0.5 |
| Lifespan Development | FA112 | 11,12 | 0.5 | Two Pathway Credits <br> and Instructor Permission |
| Application Level |  |  |  |  |
| Career Connections |  |  |  |  |
| Commund Instructor Permission |  |  |  |  |

CAREER AND LIFE PLANNING - Self-management course introduced students to the skills and strategies helpful in becoming more focused productive individuals. These courses typically emphasize goal-setting; decision-making; managing time, energy, and stress; and identifying alternatives and coping strategies. Students will also explore various careers and investigate a range of academic, communication and technical skills in all aspects of the identified clusters.

CULINARY ESSENTIALS - Culinary Essentials will give students a thorough overview of the foodservice portion of the overall hospitality and tourism industry. Students will experience dry, moist and combination heat cooking methods, cold food production, basic baking techniques and career opportunities in the hospitality and tourism industry.

HUMAN GROWTH \& DEVELOPMENT (HGD EARLY YEARS - This course provides students with knowledge about the physical, intellectual, emotional, and social growth (PIES) and development of children. Course content will provide an overview of life stages from prenatal and birth processes and fundamentals of children's milestone development during the early years.

FAMILY STUDIES - The Family Studies course explores the roles and responsibilities of parents such as how society, media, technology and diversity impact their ability to balance work and family. It also includes the development of children and parents as their earliest teacher. Parenting styles and family stages are explored as is the changing demographics which will change the face of the US family. Parenting and behavior guidance skills are strengthened through a study of positive family relationships, child abuse and neglect, safety, and health practices. Occupations related to meeting the needs of families will be analyzed. This course will promote the creation of healthy and sustainable families be they their own or those they work with.

NUTRITION \& WELLNESS - Health and life management courses focus as much on consumer education topics (such as money management and evaluation of consumer information and advertising) as on personal health topics (such as nutrition, stress management, drug/alcohol abuse prevention, disease prevention, and first aid). Course objectives include helping students develop decision-making, communication, interpersonal, and coping skills and strategies.

LEADERSHIP SERVICE IN ACTION - This introduction course converges the study of leadership principles with the action of building a healthy schoolwide culture and climate. Leadership theories, concepts, and skills are analyzed through class instruction and interactive activities. Students will examine their personal learning styles and personality types as well as motivational theories and techniques. They will investigate the give and take between individuals within a group, and especially within the educational environment. Students will also explore situations in which their skill sets and knowledge base makes them ideal leaders versus ideal supporters and teammates, as well as practicing being a good team member, leader, and school climate influencer. This course will also introduce and investigate the communication cycle and have students practice the communication process.

LIFESPAN DEVELOPMENT - Life Span Development prepares students for occupations associated with meeting the needs of people by learning about physical, intellectual, emotional and social development from childhood to death. In addition, this course helps students discover how individuals respond to the various stages of the life span with a strong tie to teen years, adulthood and later years.

CAREER CONNECTIONS - Career Connections courses provide human services/family and consumer sciences related work-based learning experiences (paid or unpaid) outside the traditional classroom. Learning goals are set by the student, teacher and employer/adult mentor to create field experiences and/or discussions related to human services/family and consumer sciences occupational technical skills.

COMMUNITY CONNECTIONS - Community Connections courses provide community based/school based learning experiences mainly within the family and consumer sciences classroom. Learning goals are set by the student, teacher and community partners to create experiences and/or discussions to enhance the development of 21 st century skills (i.e. leadership, empathy, communication, problem solving, cooperation, critical thinking, and resource management) needed to be successful in human services/family and consumer sciences related careers.

Career Cluster - Information Technology

| Information Support \& Services Pathway |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Course <br> Number | Grade | Credit |  |
| Introductory Level |  |  |  |  |
| Computer Applications | BU113 | $9,10,11,12$ | 1 |  |
| Technical Level |  |  |  |  |
| Foundations of Information Technology | BU114 | $9,10,11,12$ | 1 | Computer Applications |
| Application Level |  |  |  |  |
| Information Support and Services 1 | BU116 | $10,11,12$ | 1 | Two Pathway Credits |
| Work-based Learning in Information <br> Support and Services | BU118 | 11,12 | 1 | and Instructor Permission |

COMPUTER APPLICATIONS - This course is designed to help students move beyond the Google Platform. Students will thoroughly study Microsoft Word, Excel, Access and PowerPoint by creating professional documents that will help them throughout high school and beyond. Word activities could include flyers, business letters, formatting research papers, and resumes. Excel activities could include solving mathematical problems with formulas, creating and editing charts, and sorting data. PowerPoint activities could include creating presentations with appropriate text formatting, graphics and animation.

FOUNDATIONS OF INFORMATION TECHNOLOGY - A course intended to provide students with exposure to various information technology occupations and the information technology pathways available: Network Systems, Information Support and Services, and Programming and Software Development. Students will demonstrate core competencies in safety, electronics and basic digital theory, overview of the internet and operating systems, basic IT terminology and concepts, organization of data and materials, and basic programming. At the conclusion of the course, students should be prepared to make an informed decision about which Information Technology program(s) of study they would like to pursue in conjunction with their IPS.

INFORMATION SUPPORT AND SERVICES 1 - This course is designed for students who have chosen to pursue an Information Support and Services program of study to introduce the basic conceptual and practical skills necessary to identify, install, and manage relevant hardware and software in a server/client environment.

WORK-BASED LEARNING IN INFORMATION SUPPORT AND SERVICES - This courses provide work experience in fields related to management information systems. Goals are typically set cooperatively by the student, teacher, and employer (although students are not necessarily paid). These courses may include classroom activities as well, involving further study of the field or discussion regarding experiences that students encounter in the workplace.

| Web and Digital Communications Pathway |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Course | Course <br> Number | Grade | Credit |  |
| Introductory Level |  |  |  |  |
| Computer Applications | BU113 | $9,10,11,12$ | 1 |  |
| Technical Level |  |  |  |  |
| Web Page Design | BU217 | $9,10,11,12$ | 1 | Computer Applications |
| Graphic Design | BU219 | $9,10,11,12$ | 1 | Computer Applications |
| Computer Graphics | BU218 | $9,10,11,12$ | 1 | Computer Applications |
| Animation | BU225 | $10,11,12$ | 1 | Computer Graphics |
| Application Level | BU411 | $10,11,12$ | 1 | Two Pathway Credits <br> and Instructor Permission |
| Web \& Digital Comm. Project <br> Management |  |  |  |  |

COMPUTER APPLICATIONS - This course is designed to help students move beyond the Google Platform. Students will thoroughly study Microsoft Word, Excel, Access and PowerPoint by creating professional documents that will help them throughout high school and beyond. Word activities could include flyers, business letters, formatting research papers, and resumes. Excel activities could include solving mathematical problems with formulas, creating and editing charts, and sorting data. PowerPoint activities could include creating presentations with appropriate text formatting, graphics and animation.

WEB PAGE DESIGN - The purpose of this course is to learn how to create web pages from the ground up. Students will learn how to write code with HTML and use some drag and drop software. Each student will create many websites to demonstrate their competence with software and internal languages.

GRAPHIC DESIGN - Graphic Design courses emphasize design elements and principles in the purposeful arrangement of images and text to communicate a message. They focus on creating art products such as advertisements, product designs, and identity symbols. Graphic Design courses may investigate the computer's influence on and role in creating contemporary designs and provide a cultural and historical study of master design works of different periods and styles.

COMPUTER GRAPHICS - Computer Graphics provides students with the opportunity to create 3-D visual imagery and apply graphic techniques to various fields, such as advertising, TV/Video, and architecture. Typical course topics include modeling, simulation, and animation. Students will primarily use Blender software. Most lessons are taught via YouTube, so students need to be self-driven and manage time to complete assignments.

ANIMATION - This course introduces students to all the major features: modeling, animation, texture, lighting, rendering, expressions, rigging, dynamics, and popular workflow. Concepts are quickly reviewed and explained and then demonstrated using various computer programs. Students will gain proficiency by following examples as well as creating projects and exercises.

WEB \& DIGITAL COMMUNICATIONS PROJECT MANAGEMENT - This course provides students with the information and skills necessary for success in managing projects and operating logistical ventures in technology, business, and industry. This course covers scheduling of resources (including personnel, budget, timelines, and equipment), utilization of Gantt charts, economic principles within the workplace, and risk management. Other possible topics include developing a business plan, finance, business law, marketing and promotion strategies, insurance employee/employer relations, problem-solving and decision making, and building leadership skills. These courses may also incorporate a survey of the careers within technology and engineering industries.

## Career Cluster - Law, Public Safety, Corrections and Security

| Emergency and Fire Management Services Pathway |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Course | Course <br> Number | Grade | Credit |  |
| Introductory Level |  |  |  |  |
| Introduction to LPSS | LPS100 | $9,10,11,12$ | 0.5 |  |
| Technical Level | COL325 | $10,11,12$ | 0.5 | Contact the college/career counselor for <br> requirements |
| Medical Terminology | COL605 | $10,11,12$ | 0.5 | Contact the college/career counselor for <br> requirements |
| Hazardous Materials - First Responders |  |  |  |  |
| Application Level | LP210 |  | 12 | 1 |
| Fire Science 1 | LP301 | 12 | 0.5 | Intro to LPSS |
| LPSS (Fire) Internship | COL700 | 12 | 1 | Concurrently enrolled in Fire Science 1 <br> requirements college/career counselor for |
| EMT 1 (NCCC) |  |  |  |  |

INTRODUCTION TO LPSS - This is an introductory course designed to provide students with the knowledge of occupations available in the Law, Public Safety and Security fields and introduce them to the legal system, professional conduct, safety, and types of crimes.

MEDICAL TERMINOLOGY - This course provides the student with the basic tools for building a medical vocabulary. It emphasizes the building of medical terms from prefixes, suffixes, word roots and combining forms. Emphasis is also placed on correct pronunciation, spelling, and analysis of medical terms as they pertain to anatomy, physiology, and diseases.

HAZARDOUS MATERIALS FOR FIRST RESPONDERS - The knowledge and skills first-responding firefighters and EMS personnel need to safely respond to routing and non-routine emergencies that may involve hazardous materials.

FIRE SCIENCE 1 - This course addresses the basic requirements of a person who wishes to serve as FireFighter Level I as defined in National Fire Fighter Professional Qualifications. The basic skills and job performance requirements covered will reflect either what a firefighter actually does on the job or should be expected to do. A FireFighter I is a person who is minimally trained to function safely and effectively as a member of a firefighting team under direct supervision. This course will utilize classroom instruction, discussion, and exploration as well as performance based skill development in practical exercises with fire apparatus and firefighting tools on the fire grounds. CPR/AED certification is required and will be provided during the course.

LPSS (FIRE SCIENCE) INTERNSHIP - This course is designed to give the student job experience. The site must be the City of Ottawa Fire Department. Approval is needed from the instructor based on previous class outcomes.

EMERGENCY MEDICAL TECH (EMT) Evening class at NCCC - EMTs are clinicians, trained to respond quickly to emergency situations regarding medical issues, traumatic injuries and accident scenes. This class is designed to provide skills and knowledge necessary to sit for the EMT certification test. The class is taught by a certified EMT instructor and follows competencies set forth by the certifying agency.

| Corrections, Security, Law and Law Enforcement Services Pathway-Law Enforcement Strand |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Course | Course <br> Number | Grade | Credit |  |
| Introductory Level |  |  |  |  |
| Introduction to LPSS | LPS100 | $9,10,11,12$ | 0.5 |  |
| Technical Level |  |  |  |  |
| Law Enforcement 1 | LP200 | $10,11,12$ | 1 | Intro to LPSS |
| Hazardous Materials - First Responder | COL605 | $10,11,12$ | 0.5 | Contact the college/career counselor for <br> requirements |
| Application Level |  |  |  |  |
| Law Enforcement 2 | LP300 | 11,12 | 1 | Law Enforcement 1 |
| Law Enforcement Internship | LP301 | 12 | 0.5 | Law Enforcement 2 |

INTRODUCTION TO LPSS - This is an introductory course designed to provide students with the knowledge of occupations available in the Law, Public Safety and Security fields and introduce them to the legal system, professional conduct, safety, and types of crimes.

LAW ENFORCEMENT 1 - The course is the first of two courses designed to provide students with the skills and knowledge necessary to obtain entrance to the Law Enforcement or Highway Patrol Academy.

HAZARDOUS MATERIALS FOR FIRST RESPONDERS - The knowledge and skills first-responding firefighters and EMS personnel need to safely respond to routing and non-routine emergencies that may involve hazardous materials.

LAW ENFORCEMENT 2 - The course is the second of two courses designed to provide students with the skills and knowledge necessary to obtain entrance to the Law Enforcement or Highway Patrol Academy.

LAW ENFORCEMENT INTERNSHIP - LPSS Internship is an application level course for those LPSS students who have completed Introduction to LPSS, Law I, and Law II. The course is designed to provide LPSS students with opportunities to apply skills learned in the pathway to real-life situations and expose them to the everyday workings of various LPSS careers. Students must be pre-selected the semester prior to the internship, complete all necessary paperwork, background checks, fingerprinting, etc. required by the department, agency, or institution they are applying to. Students must provide their own transportation to and from their assigned location.

## Career Cluster - Manufacturing

| Manufacturing Pathway | Course |  |  |  |  | Course <br> Number | Grade | Credit |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Introductory Level |  |  |  |  |  |  |  |  |  |
| Intro to Industrial Technology | IND111 | $9,10,11,12$ | 0.5 |  |  |  |  |  |  |
| Production Blueprint Reading | IND100 | $9,10,11,12$ | 0.5 |  |  |  |  |  |  |
| Introduction to Welding | IND120 | $9,10,11,12$ | 0.5 |  |  |  |  |  |  |
| Technical Level | AV105 | $9,10,11,12$ | 0.5 | Introduction to Industrial Technology or <br> Introduction to Welding |  |  |  |  |  |
| Hand and Power Tools | IN500 | 11,12 | 2 | Contact the college/career counselor for <br> requirements |  |  |  |  |  |
| Welding Processes 1 <br> (NCCC Welding Level 1) | ST300 | $9,10,11,12$ | 1 |  |  |  |  |  |  |
| Robotics | IN600 |  | 12 | 2 |  |  |  |  |  |

INTRO TO INDUSTRIAL TECH - An introductory level course designed to instruct students in the basic skills necessary to all occupations in the Construction, Manufacturing and Transportation career clusters

PRODUCTION BLUEPRINT READING - This course provides students with the knowledge and ability to interpret the lines, symbols, and conventions of drafted blueprints. They generally emphasize interpreting, not producing, blueprints, although the courses may provide both types of experiences. Blueprint Reading courses typically use examples from a wide variety of industrial and technological applications.

INTRO TO WELDING - An introductory level course designed to instruct students in basic welding skills. Students will need to provide appropriate personal protective equipment.

HAND AND POWER TOOLS - An introductory class that provides technical knowledge used in the Aviation and Manufacturing area related to hand and power tools.

ROBOTICS - Robotics courses develop and expand students' skills and knowledge so that they can design and develop robotic devices. Topics covered in the course may include mechanics, electrical and motor controls, pneumatics, computer basics, and programmable logic controllers.

WELDING PROCESSES 1 (NCCC WELDING LEVEL 1) - The Welding program allows students the opportunity to complete certificates at two levels and to transfer these certificates toward an Associate of Applied Science degree in Industrial Engineering Technology. The curriculum utilizes the American Welding Society's "Schools Excelling through National Skills Standards" (SENSE) which is a nationally-recognized credentialing and certification system. The Level I Welding certificate is for students who intend to seek entry-level employment after completing a one-year program of study.

WELDING PROCESSES 2 (NCCC WELDING LEVEL 2) - The Welding program allows students the opportunity to complete certificates at two levels and to transfer these certificates toward an Associate of Applied Science degree in Industrial Engineering Technology. The curriculum utilizes the American Welding Society's "Schools Excelling through National Skills Standards" (SENSE) which is a nationally-recognized credentialing and certification system. The Level 2 certificate is for students interested in advancing their skill level beyond Level 1.

## Career Cluster-Marketing

| Marketing Pathway | Course |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Course <br> Number | Grade | Credit |  |  |
| Introductory Level |  |  |  |  |
| Business Essentials | BUS114 | $9,10,11,12$ | 0.5 |  |
| Technical Level |  |  |  |  |
| Entrepreneurship | BUS115 | $9,10,11,12$ | 0.5 |  |
| Principles of Marketing | BUS216 | $10,11,12$ | 1 | Business Essentials |
| Accounting 1 | BU213 | $10,11,12$ | 1 |  |
| Computer Graphics | BU218 | $9,10,11,12$ | 1 | Computer Applications |
| Graphic Design | BU219 | $9,10,11,12$ | 1 | Computer Applications |
| Sports/Entertainment Marketing | BU300 | $10,11,12$ | 0.5 |  |
| Web Page Design | BU217 | $9,10,11,12$ | 1 | Computer Application |
| Digital Marketing | BU220 | $9,10,11,12$ | 0.5 |  |
| Application Level |  |  |  |  |
| Marketing Applications | BU315 | 11,12 | 1 | Two Pathway Credits <br> and Instructor Permission |

BUSINESS ESSENTIALS - This is a core course designed to give students an overview of the business, marketing and finance career cluster occupations. Students will develop an understanding of how academic skills in math, economics, and written and oral communications are integral components of success in these occupations. Students will examine current events to determine their impact on business and industry and legal and ethical behavior, acquire knowledge of safe and secure environmental controls to enhance productivity, determine how resources should be managed to achieve company goals, and identify employability and personal skills needed to obtain a career and be successful in the workplace. As students learn about the different types of business ownership, they will interpret industry laws and regulations to ensure compliance, identify principles of business management, and analyze business practices to determine ethics and social responsibilities.

ENTREPRENEURSHIP - Entrepreneurship courses acquaint students with the knowledge and skills necessary to own and operate their own businesses or the ability to use the entrepreneurial mindset in an existing operation. Topics from several fields typically form the course content: economics, marketing principles, human relations and psychology, business and labor law, legal rights and responsibilities of ownership, business and financial planning, finance and accounting, and communication.

PRINCIPLES OF MARKETING - Principles of Marketing courses offer students insight into the processes affecting the flow of goods and services from the producer to the consumer. Course content ranges considerably as general marketing principles such as purchasing, distribution, and sales are covered; however, a major emphasis is often placed on kinds of markets; market identification; product planning, packaging and pricing; and business management.

ACCOUNTING 1 - Accounting courses introduce and expand upon the fundamental accounting principles and procedures used in businesses. Course content typically includes the full accounting cycle, payroll, taxes, debts, depreciation,ledger and journal techniques, and periodic adjustments. Students may learn how to apply standard auditing principles and prepare budgets and final reports. Calculators, electronic spreadsheets, or other automated tools are usually
used. Advanced topics may include elementary principles of partnership and corporate accounting and the managerial uses of control systems and the accounting process.

COMPUTER GRAPHICS - Computer Graphics provides students with the opportunity to create 3-D visual imagery and apply graphic techniques to various fields, such as advertising, TV/Video, and architecture. Typical course topics include modeling, simulation, and animation. Students will primarily use Blender software. Most lessons are taught via YouTube, so students need to be self-driven and manage time to complete assignments.

GRAPHIC DESIGN - Graphic Design courses emphasize design elements and principles in the purposeful arrangement of images and text to communicate a message. They focus on creating art products such as advertisements, product designs, and identity symbols. Graphic Design courses may investigate the computer's influence on and role in creating contemporary designs and provide a cultural and historical study of master design works of different periods and styles.

SPORTS/ENTERTAINMENT MARKETING - Sports and Entertainment Marketing focuses on marketing and management functions/tasks that can be applied in amateur or professional sports or sporting events, entertainment or entertainment events, selling or renting of supplies and equipment (other than vehicles) used for recreational or sporting purposes, products and services related to hobbies or cultural events, or businesses primarily engaged in satisfying the desire to make productive or enjoyable use of leisure time. Students in this class will be using marketing /business skills to enhance the Ottawa Sports Network Live Streaming Programming.

WEB PAGE DESIGN - The purpose of this course is to learn how to create web pages from the ground up. Students will learn how to write code with HTML and use some drag and drop software. Each student will create many websites to demonstrate their competence with software and internal languages.

DIGITAL MARKETING - Digital Marketing covers the principles and functions of marketing from the standpoint of conducting business on the Internet. Typically, students develop these useful skills: using the Internet as a marketing tool, conducting a marketing analysis via the Internet, planning marketing support activities, managing an electronic marketing campaign, managing/owning a business via the Internet, and analyzing the impact of the Internet on global marketing.

MARKETING APPLICATIONS - Marketing Applications furthers student understanding and skills in the various marketing functions. Students coordinate channel management with other marketing activities, discuss the nature of marketing plans, generate product ideas, coordinate activities in the promotional mix, and demonstrate specialized sales processes and techniques. Economic and financial concepts are also stressed throughout the course. Current technology will be used to acquire information and to complete the projects. Throughout the course students are presented problem-solving situations for which they must apply academic and critical-thinking skills. Formal reflection is an on-going component of the course along with four projects.

## Career Cluster - Transportation

| Aviation Maintenance Pathway | Course |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  | Course <br> Number | Grade | Credit |  |
| Introductory Level |  |  |  | Prerequisites |
| Intro to Industrial Technology | IND111 | $9,10,11,12$ | 0.5 |  |
| Production Blueprint Reading | IND100 | $9,10,11,12$ | 0.5 |  |
| Technical Level |  |  |  |  |
| Hand and Power Tools | AV105 | $9,10,11,12$ | 0.5 | Intro to Industrial Tech |
| Aviation Fundamentals | AV107 | $9,10,11,12$ | 0.5 | Hand and Power Tools |
| Aviation Systems | AV109 | $10,11,12$ | 1 | Aviation Fundamentals |
| Application Level | AV111 | 11,12 | 1 | Two Pathway Credits <br> and Instructor Permission |
| Unmanned Aircraft System |  |  |  |  |

INTRO TO INDUSTRIAL TECH - An introductory level course designed to instruct students in the basic skills necessary to all occupations in the Construction, Manufacturing and Transportation career clusters

PRODUCTION BLUEPRINT READING - This course provides students with the knowledge and ability to interpret the lines, symbols, and conventions of drafted blueprints. They generally emphasize interpreting, not producing, blueprints, although the courses may provide both types of experiences. Blueprint Reading courses typically use examples from a wide variety of industrial and technological applications.

HAND AND POWER TOOLS - An introductory class that provides technical knowledge used in the Aviation and Manufacturing area related to hand and power tools.

AVIATION FUNDAMENTALS - Course Required for Pathway Approval. An Introduction to Aviation fundamentals related to materials, processes, and history of Aviation.

AVIATION SYSTEMS - Provides students with an in-depth knowledge of the major systems and components of an Aircraft.

UNMANNED AIRCRAFT SYSTEMS (UAS) - This course teaches the principles, practices, and regulation of sUAS operations.

Other Practical Arts

| Course | Course <br> Number | Grade | Length | Credit | Prerequisites |
| :--- | :--- | ---: | :--- | :--- | :--- |
| Work Based Learning (WBL) | MIS415 | 12 | Sem or <br> Year | $0.5-2.0$ |  |
| Level I Welding (NCCC) | CO301 | 11,12 | Year | 1 credit per <br> semester |  |
| Level II Welding (NCCC) | CO410 | 12 | Year | 1 credit per <br> semester | Contact the college/career <br> counselor for requirements |
| Certified Nurse Aide (NCCC) | COL322 | 11,12 | Sem | 1 |  |
| Certified Medication Aide (NCCC) | COL323 | 12 | Sem | 0.5 |  |
| Level I HVAC (NCCC) | CO312 | 11,12 | Sem | 3 |  |
| Level II HVAC (NCCC) | CO412 | 12 | Sem | 3 |  |
| Level I Electrical Technology | CO314 | 11,12 | Sem | 1 |  |

WORK-BASED LEARNING - Students must have reliable transportation. Students may enroll in up to 2 class periods each semester. Some placements may require hours outside of the school day. Specific paperwork is required for each placement.

LEVEL I WELDING (NCCC) - The Welding program allows students the opportunity to complete certificates at two levels and to transfer these certificates toward an Associate of Applied Science degree in Industrial Engineering Technology. The curriculum utilizes the American Welding Society's "Schools Excelling through National Skills Standards" (SENSE) which is a nationally-recognized credentialing and certification system. The Level I Welding certificate is for students who intend to seek entry-level employment after completing a one-year program of study.

LEVEL II WELDING (NCCC) - The Welding program allows students the opportunity to complete certificates at two levels and to transfer these certificates toward an Associate of Applied Science degree in Industrial Engineering Technology. The curriculum utilizes the American Welding Society's "Schools Excelling through National Skills Standards" (SENSE) which is a nationally-recognized credentialing and certification system. The Level II certificate is for students interested in advancing their skill level beyond Level I.

CERTIFIED NURSE AIDE (NCCC) - The Certified Nurse Aide or CNA is a 90 -hour course designed for individuals seeking an entry-level position in the area of adult healthcare. This course includes a study of the aging process and its related conditions and the nursing skills required in assisting geriatric residents to reach and maintain their highest level of wellness consistent with the limitations imposed by the aging process. This ninety ( 90 ) clock hour course includes forty-five (45) hours of theory and twenty-five (25) hours of supervised clinical experience in a nursing home and twenty (20) hours of lab. This course prepares students for the Certified Nurse Aide Exam. Students cannot take the exam until he/she is 18 years of age.

CERTIFIED MEDICATION AIDE (NCCC) - The medication aide certificate is valid for two years from the date issued. To maintain a valid certificate, you must complete, at any time during those two years, a program of 10 hours of continuing education approved by the certifying agency. Students must be 18 years old to take the state exam and qualify with a reading placement score. Please check with the college coordinator for requirements before enrolling for the class.

LEVEL I HVAC (Heating, Ventilation, and Air Conditioning) (NCCC) - The HVAC program offers a certificate and/or an Associate of Applied Science degree in Heating, Ventilation, and Air Conditioning Technology. The first two
semesters cover the electrical and heating side of HVAC. The program utilizes the National Center for Construction Education and Research (NCCER) curriculum. NCCER is a nationally-recognized credentialing and certification system. Students completing the first two semesters will cover NCCER Core and Level 1. The program focuses on heating fundamentals; the types of furnace designs and their components and presents the basic procedures for installing and servicing furnaces Also included in this course is the design, construction and joining of sheet metal ducting used in HVAC systems.

LEVEL II HVAC (Heating, Ventilation, and Air Conditioning) (NCCC) - The HVAC program offers a certificate and/or an Associate of Applied Science degree in Heating, Ventilation, and Air Conditioning Technology. The last two semesters cover the refrigeration and airflow side of HVAC. The program utilizes the National Center for Construction Education and Research (NCCER) curriculum. NCCER is a nationally-recognized credentialing and certification system. Students completing the first two semesters will cover NCCER Levels $2,3, \& 4$. The program explains the factors that affect the heating and cooling loads of a building. It describes the process by which the heating and cooling loads are calculated; explains air properties, related gas laws, and psychrometric principles and charts; and introduces the trainee to various heat recovery/reclaim devices and energy reduction apparatuses. It describes the purpose of planned maintenance and outlines the procedures for servicing HVAC equipment.

LEVEL 1 ELECTRICAL TECHNOLOGY (NCCC) EVENING TIME SLOT - Learn all about electrical technology with courses that review of common code issues in residential electrical installations; electrical exam prep, which prepares electricians to sit for professional journeyman, master and electrical inspector exams

| Miscellaneous Electives |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Course | Course <br> Number | Grade | Credit | NCAA | Prerequisites |
| Cyclone Heroes | AI211 | 9, 10, 11, 12 | 1 |  |  |
| Office Aide | AI311 | 11, 12 | . 25 per semester |  | Application, Principal Permission, and GPA |
| Library Aide | AI318 | 11, 12 | . 25 per semester |  | Application, Principal Permission, and GPA |
| Teacher's Aide | AI312 | 11, 12 | . 25 per semester |  | Application, Teacher Permission, and GPA |
| Specialized Aide | AI315 | 11, 12 | $\begin{gathered} .25 \text { per } \\ \text { semester } \end{gathered}$ |  | Application, Teacher Permission, CTE Coordinator Approval |
| ACT Prep | MIS250 | 10, 11, 12 | 0.5 |  |  |
| A/B Plus | MI102 | 9 | 1 |  | Dual Enrollment in Algebra A/B with teacher placement |

CYCLONES HEROES - This course is designed to create and foster a reciprocal relationship between students with special needs and their general education peers as they work collectively towards a common goal of building school culture, promoting kindness and inclusion, and community outreach. Students with individualized educational plans and general education students will collaborate to focus on spreading kindness, inclusion, and creating positive school culture through community impact projects. This class is repeatable throughout high school.

OFFICE AIDE - Year-long Application and administrator approval required. Approval will include consideration of GPA, attendance and behavior, as well as appropriate skills to perform various office duties. Credit $=0.25$ per semester.

LIBRARY AIDE - Year-long Application and administrator approval required. Approval will include consideration of GPA, attendance and behavior, as well as appropriate skills to perform various library duties. Credit $=0.25$ per semester.

TEACHER'S AIDE - Year-long Teachers will distribute applications and administration will have final approval. Credit $=0.25$ per semester.

SPECIALIZED AIDE- Year-long teacher aide for a CTE teacher. Must have approval from administration. Credit is .25 per semester.

ACT PREP - ACT Prep is a course that allows students to prepare for the ACT test. This class is designed for students who want to score well on their ACT test or to improve their ACT scores. Strategies and practice tests will be used to help students increase test taking skills.

A/B PLUS - Students receive an elective credit for this course, as they are enrolled in it as a support class for Algebra $\mathrm{A} / \mathrm{B}$. A/B Plus is used to strengthen students' understanding of concepts covered during Algebra $\mathrm{A} / \mathrm{B}$. This class time is used to utilize extra help, homework time, and practice on math concepts. Students will also practice their basic math skills, state assessment concepts, and problem solving skills to help with future math classes.

