

Southeastern High School

Course Description Book

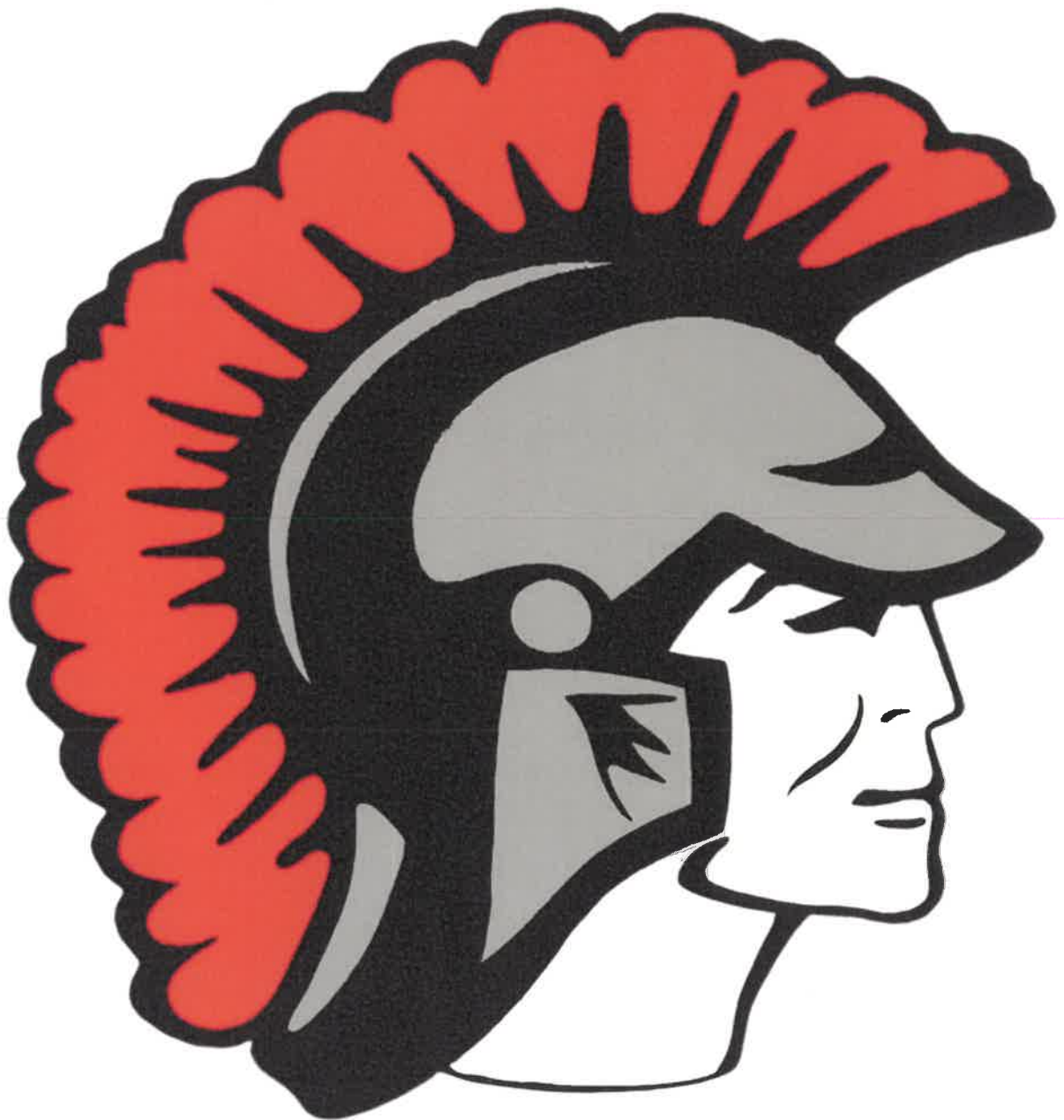


Table of Contents

Graduation Requirements.....	3
Honors Diploma Requirements.....	4
Permanent Pathways & Seals.....	5
CTC Pathway.....	8
Early Graduation.....	11
CCP Courses at Southeastern.....	13
PE Waiver Requirements.....	14
Letter From the Principal.....	17
Business Department.....	18
English Department.....	20
Fine Arts Department.....	22
Music Department.....	24
Foreign Language Department.....	25
Health and Physical Education Department.....	26
Industrial Technology Department.....	27
Mathematics Department.....	29
Science Department.....	32
Social Studies Department.....	34
Agriculture Department.....	37
Family & Consumer Sciences Department.....	40

Southeastern Graduation Requirements

Common Core Curriculum for College/Career Readiness

4 English

4 Math

must include 1 unit of Algebra II or the equivalent

3 Science

must include 1 unit of physical science, 1 unit of life science, and 1 unit advanced study in one or more of the following sciences: chemistry, physics, or other physical science, advanced biology or other life science; astronomy, physical geology, or other earth or space science

3 Social Studies

1 American History, 1 Government

1 Fine Art

½ PE

2 semester classes

½ Health

½ Personal Finance

5 Electives

must include 1 or any combination of foreign language, fine arts, business, career-technical education, family and consumer sciences, technology, agricultural education. All students (except career-technical students) must complete at least two semesters of fine arts.

22 TOTAL CREDITS

***Students must also complete all permanent pathway requirements for the class of 2023 and beyond.**

Honors Diploma Criteria

High School Academic Diploma with Honors for Graduating Classes of 2011 and Beyond <i>Students need to fulfill only 7 of the following 8 criteria</i>	
Subject	Criteria
English	4 Units
Mathematics	4 Units, including Algebra 1, Geometry, Algebra II or equivalent and another higher level course or a four-year sequence of courses that contain equivalent Content
Science	4 Units, including 2 units of advanced science
Social Studies	4 Units
Foreign Language	3 Units (3 units of 1 language or 2 units of 2 different languages)
Fine Arts	1 Unit
Grade Point Average	3.5 on a 4.0 scale
ACT/SAT Score	27 ACT / 1280 SAT

Diploma with Honors requirements pre-suppose the completion of all high school diploma requirements in the Ohio Revised Code including:

- | | |
|---------------------------|----------------------------|
| ½ Unit Physical Education | ½ Unit in American History |
| ½ Unit Health | ½ Unit in Government |

***Advanced science refers to courses that are inquiry based with laboratory experiences. They must align with the grades 11/12 standards (or above) or with an Advanced Placement science course or entry-level college course (clearly preparing students for a college freshman-level science class, such as anatomy, botany or astronomy).**

Graduating Class of 2023 and Beyond - PERMANENT PATHWAY - Competency and Readiness Requirements

The graduating class of 2023 and beyond will need to demonstrate both **Competency and Readiness**:

1. Demonstrating Competency - Students will demonstrate competency in the foundational areas of English Language Arts II and the Algebra I End of Course Exams (or through alternative demonstrations, which include College Credit Plus credit, 2 career focused activities or military enlistment).

Demonstrating Readiness - Students will also need to demonstrate readiness for their post-high school paths by earning 1 of the following 3 local seals: the Student Engagement Seal, the Community Service Seal, or the Fine Arts Seal (See below). In addition to 1 of the local seals, students must also earn one of the following Ohio seals: OhioMeansJobs Readiness Seal, Industry Recognized Credential Seal, College-Ready Seal, Citizenship Seal, Science Seal, Honors Diploma Seal, Seal of Biliteracy, or Technology Seal.

Locally Defined Diploma Seals Guidelines for Districts and Schools

OVERVIEW

Each Child, Our Future, Ohio's strategic plan for education, calls for a student-centered system that addresses the needs of an increasingly diverse student population and prepares students for a rapidly changing economy. Specifically, the plan recognizes the importance of the development of vital leadership, reasoning, social and emotional competencies that are required for success in high school and beyond.

State law created a system of 12 diploma seals, including three locally defined seals for students to demonstrate academic, technical and professional readiness for careers, college, the military or self-sustaining professions. Each seal allows students to demonstrate knowledge and skills essential for future success in their chosen post-high school paths.

Students must earn two seals to qualify for a high school diploma, one of which may be a locally defined diploma seal.

LOCALLY DEFINED DIPLOMA SEALS

ORC 3313.6114(C)(8)-(10), ORC 3313.6114(D)

Districts and schools are required to adopt guidelines for at least one locally defined diploma seal. Districts and schools have discretion over the guidelines students must meet to earn the locally defined seals. This document outlines considerations and existing resources districts

may use to inform the development of the locally defined diploma seals. The general requirements for the three locally defined diploma seals include:

Community Service Seal: Students will meet the requirement of the Community Service Seal by completing a community service project that meets the guidelines set by the school district board of education or school governing authority.

Student Engagement Seal: Students will meet the requirement of the Student Engagement Seal by participating in extracurricular activities such as (but not limited to) athletics, clubs or student government, to a meaningful extent, as determined by the guidelines set by the school district board of education or school governing authority.

Fine and Performing Arts Seal: Students will meet the requirement of the Fine and Performing Arts Seal by demonstrating skill in the fine or performing arts according to an evaluation that is aligned with guidelines set by the school district board of education or school governing authority.

Ohio law does not establish minimum guidelines (for example, number of hours, semester hours or other criteria) for the locally defined diploma seals. Districts are encouraged to be thoughtful of the intent of the locally defined seals and build criteria that promote connections to their schools, the broader community and the arts when developing the requirements for each seal.

Community Service Seal

In order for a student to achieve the *Community Service Seal* from Southeastern, a student must do a minimum of 20 hours of community service at an approved location and write a 2 page essay detailing the experience and how it has impacted him/her. Students taking Financial Literacy will earn the *Community Service Seal* through the course. Students earning the *Community Service Seal* outside of Financial Literacy must have their service site approved by the principal or school counselor.

Student Engagement Seal

In order for a student to achieve the *Student Engagement Seal* from Southeastern, a student must be involved in a minimum of 4 activities from the time they enter high school, to the time they graduate. Approved activities include:

All Southeastern affiliated sports, FCCLA, FFA, NHS, Student Council, Class Officer, Prom Committee, Spanish Club, Trojan Wall, Team Manager, Assistant Trainer, Quick Recall, Young Authors, and SOS.

Activities not listed above may count toward the minimum 4 activity requirement, but they must be approved by the principal or school counselor.

Fine Arts Seal

Students looking to earn the *Fine Arts Seal* from Southeastern must be involved in a minimum of 4 fine art classes and/or activities, which include:

Classes - Intro to Art, Crafts, Ceramics, Adv. Ceramics, Drawing & Painting, Concert Choir, Symphonic Choir, and Band, Marching Band, or Concert Band.

Activities - Musical

Classes and Activities not listed above may count toward the minimum 4 class/activity requirement, but they must be approved by the principal or school counselor.

SPRINGFIELD-CLARK (CTC)

The CTC gives students the opportunity to study in depth a vocational field

I. CTC Requirements

- A. The student considering attending the Springfield-Clark CTC his/her junior year must remember that he/she is responsible for the 22 credits he/she needs to graduate.
- B. Courses that must be completed at Southeastern before you can attend the career center include:
 1. Two (2) credits of English
 2. Two (2) credits of math
 3. Two (2) credits of science
 4. Two (2) credits of social studies
 5. One-half (1/2) credit of health
 6. One-half (1/2) credit of physical education

SPRINGFIELD-CLARK CAREER TECHNOLOGY CENTER

Career Ready, College Ready, Life Ready!

The primary goal of the Springfield-Clark CTC is to assist students in obtaining skills that will allow them to enter the job market or to pursue further training in colleges, universities or technical schools. The CTC offers a variety of programs that provide career-related training.

CTC Schedule Options

The CTC offers both full-day and half-day programs. Half-day programs allow students to attend the career center for half of the school day and complete academic classes at their associate school. Some associate high schools provide transportation to and from the career center for ½ day students.

Apprenticeship Option

Apprenticeships are available in virtually every career-related program offered at the career center. Apprentices are paid wages while participating employers teach them real-life work skills on the job site. Students attend academic and related classes at the career center and participate in co-op, work-site learning in coordination with the apprenticeship.

Academics

In addition to learning career-related skills students may also take English, Government, History, Math and Science courses. We offer both general and advanced academics like CCP English, Anatomy & Physiology, Chemistry, Algebra II, etc. Academic courses teach concepts that are directly related to a student's technical program and fulfill requirements for graduation and college admission.

Credits

Students at the career center may earn from sixteen to eighteen credits toward graduation depending on the program in which they choose to enroll.

College Credit at CTC

CTC has articulation agreements with Clark State Community College, Northwestern College, Columbus State Community College, The Nashville Auto-Diesel College, and Sinclair Community College to just name a few. These articulation agreements allow students to earn college credit while attending the career center. Post-secondary options are available to students who qualify.

Fees

Students of local high schools may attend the career center tuition-free. However, depending on the program, students may be required to pay for tools, uniforms and a school fee. Scholarships, fee assistance and payment plans are available to student who qualifies financially.

Transportation

The Associate high school will bus students to and from the CTC. Students may choose to provide their own transportation.

Extra-curricular Activities at CTC

The CTC daily schedule allows students to participate in extra-curricular activities like sports, band, and cheerleading at their associate high school. In addition to participation in various activities available at the associate high school, CTC students may get involved in the following national student organizations, which help develop leadership skills:

BPA – Business Professionals of America

DFCA – Drug Free Clubs of America

Educators Rising – Career Technical Student Organization for students in educational careers

FCCLA – Family, Community & Career Leaders of America

FFA – Future Farmer of America

NHS – National Honor Society

NTHS – National Technical Honor Society

SkillsUSA – Career Technical Student Organization for students in trade, technical and skilled service occupations

Many of the clubs offer leadership opportunities and skill competitions that challenge students to compete for awards by mastering skills in their career technical program.

Graduation

Upon successful completion of the CTC program, state graduation tests and academic courses, CTC students will graduate and receive a high school diploma from their associate high school. CTC students will also attend the Convocation Ceremony that is held on the last day of school. Students who successfully complete their career technical program receive a certificate of completion and a Career Passport.

Springfield-Clark CTC

Career Fields and Programs

Ag & Environmental Systems

Forestry and Park Management
Veterinary Science

Arts & Communication

Computer Graphic Arts

Career Exploration Programs

Jaguar Academy (Sophomores only)
Job Training
Project SEARCH

Construction Technologies

Carpentry
Electrical Trades
Heating & Air Technology

Education and Training

Education Explorations

Engineering and Science Technologies

Engineering and Architectural Design

Health Science

Dental Assisting
Health Occupations

- Emergency Medical Technician
- Medical Assisting
- Nurse Assisting

Hospitality and Tourism

Culinary Arts

Human Services

Cosmetology

Information Technology

Cyber Security & Computer Networking
Digital Media Design
Software Programming Technologies

Manufacturing Technologies

Applied Engineering & Manufacturing
Welding & Fabrication

Transportation Systems

Auto Body Collision Repair
Auto Services
Auto Technology & Motorcycle Maintenance

Withdrawal-Transfer Policy

If students who have been accepted at the CTC change their mind prior to June 1st the following steps should be completed in order to re-enroll at their local high school:

1. Notify the Associate Schools Coordinator at 325-7368 ext. 113 that they will **not** be attending the CTC.
2. Call the associate high school and schedule an appointment with their counselor to prepare a class schedule.

Students who do not withdraw from the CTC by June 1st may transfer back to their associate high school under the following guidelines:

1. Students are required to attend the CTC for a one-week trial period (five school days).
2. The final decision to return to the associate high school must be made before the tenth day of school at the CTC.
3. *After the tenth day of school students are obligated to complete the year at the CTC*

Early Graduation

The Board of Education acknowledges that some students seek to pursue educational goals that include graduation from high school at an earlier date than their designated class.

A student who completes the requirements for early high school graduation may participate in the graduation ceremonies with his/her designated class or the class graduating in the year in which s/he completes the District's requirements for high school graduation.

Early High School Graduation - General

Application for early high school graduation must be submitted to the high school principal.

The principal may honor this request if all conditions for high school graduation are met and the student fulfills the high school graduation requirements.

Early High School Graduation – Advanced Learners

Any student residing in the District may be referred for early high school graduation by a staff member or parent/guardian to the principal of his/her school. Students may refer themselves or a peer through a staff member who has knowledge of the referred child's abilities. Copies of referral forms will be available at each school building. The principal of each school (or his/her designee) will solicit referrals of students for early high school graduation annually, and will notify all staff s/he supervises the referral process.

Students referred for early high school graduation will be evaluated in a prompt manner. The building principal will schedule the evaluations. Normally, changes in a student's schedule will only occur at the start of a semester.

Before a student is evaluated for early high school graduation, the principal (or his/her designee) must obtain written permission from the student's parent/guardian.

Evaluations related to referrals that occur during the school year will ordinarily be completed and a written report issued within forty-five (45) calendar days. Evaluations related to referrals that occur at the end of a school year or during the summer will be completed and a written report issued either before the end of the school year, if possible, or within forty-five (45) calendar days of the start of the next school year.

Upon referral, the student's principal (or his/her designee) shall convene an acceleration evaluation committee to determine the appropriateness of early high school graduation for the student. The committee shall include the following:

- A. a parent/legal guardian of the referred student
- B. a gifted education coordinator or gifted intervention specialist, or, if neither is available, a school psychologist or guidance counselor with expertise in early high school graduation
- C. a principal or assistant principal from the student's current school
- D. a current teacher of the referred student

The acceleration evaluation committee shall be responsible for conducting a fair and thorough evaluation of the student.

Students referred for early high school graduation shall be evaluated based on past academic performance, measures of achievement based on State academic content standards, and successful completion of State mandated graduation requirements. The acceleration evaluation committee will consider the student's own thoughts on possible accelerated placement in its deliberations.

The acceleration evaluation committee shall issue a written decision on the outcome of the evaluation process to the principal and the student's parent/guardian. This notification shall include instructions for appealing the decision.

Appeals must be made in writing to the Superintendent within thirty (30) calendar days of the

parent/guardian receiving the committee's decision. The Superintendent or his/her designee shall review the appeal and notify the parent/guardian of his/her final decision within thirty (30) calendar days of receiving the appeal. The Superintendent or his/her designee's decision shall be final.

If the student is recommended for early high school graduation, the acceleration evaluation committee will develop a written acceleration plan designed to allow the student to complete high school graduation requirements on an accelerated basis. The plan may include the provision of educational options in accordance with A.C. 3301-35-06(G), waiving District graduation requirements that exceed those by the State, and early promotion to sophomore (or higher) status to allow the student to take the Ohio Graduation Test.

A staff member will be assigned to oversee implementation of the written acceleration plan and to monitor the adjustment of the student to the accelerated setting.

R.C. 3324.10

Revised 8/15/06

Revised 10/16/07

College Credit Plus Courses Offered at Southeastern

Students will have the option to earn college credit from Clark State Community College through several courses offered at Southeastern High School. Below you will find a list of courses offered at Southeastern and the college semester hours that may be earned upon successful completion of the course. It is important to note that in order for students to receive college credit for the courses listed below, they must meet the placement requirements set forth by Clark State. Placement scores are met through participation in Clark State's Accuplacer Exam, or through the ACT or SAT.

Teacher	High School Course	Clark State Course	Cred Hrs	Pre-Reqs	NextGen Accuplacer	ACT Score	SAT Score
Dave Morrow	Intro to Engineering Design	ENT 2600 CAD 2100	6.0	CPE 0200 CPE 0500	Reading: 240 QReasoning: 225	ACTR: 20 ACTM: 21	SATR: 25.0 SATM: 26.0
Dave Morrow	Civil Engineering & Arch.	CAD 1301	3.0	CPE 0200	Reading: 240 Writing: 2 QReasoning: 225	ACTR: 20 ACTE: 15 ACTM: 21	SATR: 25.0 SATW: 23.0 SATM: 25.5
Darrick Riggs	Agronomic Systems	AGR 1750	3.0		Reading: 240 QReasoning: 225	ACTR: 20 ACTM: 21	SATR: 25.0 SATM: 26.0
Darrick Riggs	Ag Bus. Mgmt.	AGR 2700	4.0	ENG1111	Writing: 5 Reading: 240	ACTR: 21 ACTE: 18	SATR: 25.0 SATW: 25.0
Kathy Mercer	Statistics	STT 2640 STT 2650	5.0		Reading: 230 QReasoning: 266	ACTR: 20 ACTM: 22	SATR: 22.0 SATM: 27.5
Kathy Mercer	Calculus	MTH 2200	5.0		Reading: 230 Alg & Func: 281	ACTR: 20 ACTM: 26	SATR: 22.0 SATM: 29.5
Kathy Mercer	Adv. Algebra II	MTH 1280	4.0		Reading: 230 Alg & Func: 250	ACTR: 20 ACTM: 22	SATR: 22.0 SATM: 27.5
Brian Hecker	Pre-Calculus	MTH 1340	5.0		Reading: 230 Alg & Func: 266	ACTR: 20 ACTM: 23	SATR: 22.0 SATM: 28.5
Steve Lenk	Chemistry	CHM 1150	4.0		Writing: 5 Alg & Func: 250	ACTE: 18 ACTM: 22	SATW: 25.0 SATM: 26.0
Kristen O'Hara	Advanced English 11	ENG 1111 ENG 1112	6.0		Reading: 240 Writing: 5	ACTR: 21 ACTE: 18	SATR: 25.0 SATW: 25.0
Kristen O'Hara	English 12	ENG 1112	3.0	ENG 1111	Reading: 240 Writing: 5	ACTR: 21 ACTE: 18	SATR: 25.0 SATW: 25.0
Kristen O'Hara	English 11	ENG 1111	3.0		Reading: 240 Writing: 5	ACTR: 21 ACTE: 18	SATR: 25.0 SATW: 25.0
Sarah Cline	Spanish 3	SPN 1112	3.0		Reading: 230 Writing: 4	ACTR: 20 ACTE: 17	SATR: 22.0 SATW: 24.0

PHYSICAL EDUCATION WAIVER APPLICATION

In the State of Ohio, students are required to complete one-half unit of physical education for graduation. One-half unit requires a minimum of 120 hours of course instruction. At Southeastern High School, this graduation requirement is met when a student completes two semester courses, each worth a quarter credit.

Beginning with the 2019-2020 school year, students in grades 9-11 who successfully complete two full seasons of recognized school activities as outlined below may be excused from the high school physical education graduation requirement. However, prior participation in recognized activities cannot be retroactively used to fulfill waiver requirements. In addition, students entering their senior year who have not completed ALL waiver requirements will be placed in physical education classes immediately in order to fulfill graduation requirements.

The "Two Full Seasons" requirement can be completed within a single school year. According to Ohio Revised Code, boards of education may NOT provide for partial completion of the high school physical education requirement; therefore, the one-half unit requirement cannot be partially exempted. For example, it is not possible to combine one semester of a physical education course with successful completion of one athletic, marching band, or cheerleading season to meet the physical education graduation requirement.

IMPACT ON OVERALL GRADUATION REQUIREMENTS

Students utilizing the P.E. exemption are still required to meet all other graduation requirements established by Southeastern High School, including the completion of 22 credits required for graduation. Please note that students will not earn a letter grade when utilizing the P.E. exemption waiver.

RECOGNIZED ACTIVITIES

Southeastern High School recognizes that "Two Full Seasons" of appropriate participation in the following activities may be used to satisfy P.E. Waiver requirements:

Baseball	Cross Country	Soccer	Volleyball
Basketball	Football	Softball	Wrestling
Bowling	Golf	Tennis	
Cheerleading	Marching Band	Track	

Intramural sports or other club/non-school sponsored activities will not be approved

Students who do not complete a FULL season may lose the ability to use a P.E. waiver

PROCESS FOR PHYSICAL EDUCATION EXEMPTION

1. Student indicates a desire to be exempt from physical education courses by choosing the P.E. waiver option during course selection.
2. Once the student has completed a full season, the Physical Education Exemption Form must be turned in to the guidance office by the end of the semester following the season. For example, fall athletes will turn in a waiver by the end of the 1st semester and winter/spring athletes by the end of the 2nd semester. It is the student's responsibility to fill out and turn in the P.E. waiver by the end of the semester following the season of activity.
3. Once the appropriate exemption waiver documentation is approved, students will have fulfilled the necessary requirements for exemption.

****Please be aware that this exemption may not transfer should a student transfer to a different school district with different policies****

****The student is expected to complete an exemption form for each season for which a waiver is being used. Therefore, a student must have two completed waiver forms on file in order to graduate. It is the responsibility of the student to turn the form in. THIS WILL NOT BE DONE AUTOMATICALLY FOR THE STUDENT****

PHYSICAL EDUCATION WAIVER FORM

Southeastern High School

Date _____

Student Name _____

Grade Level _____

In making this request for exemption from physical education as a graduation requirement, I understand the following conditions apply:

1. Approval will be granted for sports/activities starting with the 2019-2020 school year.
2. Students must successfully complete **2 FULL seasons** of approved sports/activities during their first 3 years of high school to be eligible for alternative P.E. credit.
3. A P.E. class may **NOT** be combined with a sport/activity to equal one-half credit for P.E.

Sport _____

Coach _____

Year _____

Parent/Guardian _____

Date _____

Student _____

Date _____

Postseason Signatures:

Athletic Director _____

Date _____

School Counselor _____

Date _____

FORWARD (All Courses)

The time spent by students and parents reviewing the information contained in this booklet is an important factor in ensuring academic success. Take time to consider your post-secondary goals and select courses that will best prepare you to meet those future challenges. The guidance counselor, principal, and faculty will do their best to help you in reaching these decisions.

Kri

Choose courses that offer a realistic challenge. Classes that stimulate your mind will be more interesting and rewarding. They will make school worthwhile. However, you must be careful not to overextend yourself. Not all courses are within the ability of every student.

Students are expected to schedule at least 7 periods of class and must have permission to schedule any less. This will allow the student to get full value from the time spent in school.

Several courses have been designated as “Honors Classes.” These are the most advanced, most challenging courses offered at Southeastern High School. Those courses are:

Advanced Placement English
Honors Physics
Advanced Placement US History
Honors Anatomy and Physiology
Advanced Placement Statistics

Honors Advanced Biology
Advanced Placement Calculus
Honors Pre-Calculus
Honors Spanish III/IV

Please consider your course selections carefully. It’s your future. Make the most of it! We expect you to “*Strive for Excellence*” in every course you choose.

Sincerely,

PJ Bertemes
Principal

BUSINESS EDUCATION

GOOGLE APPLICATIONS - Odd Years Only - 6133 - 0.5 credit

Grades 9-12

Students will learn basic typing skills and create documents, spreadsheets, and presentations. Students will gain experience using Google Docs, Google Sheets, and Google Slides. In the second half of the course, students will learn to use more advanced Google Applications such as Google Sites. All students should consider taking this course. This course will prepare students for real-life computer situations.

Prerequisite: There are no prerequisites for this class.

DIGITAL ART DESIGN - Odd Years Only - 6216 - 0.5 credit

Grades 9-12

In this exploratory course, students learn the elements and principles of design, as well as foundational concepts of visual communication. While surveying a variety of media and art, students use image editing, animation, and digital drawing to put into practice the art principles they've learned. They explore career opportunities in the design, production, display and presentation of digital artwork.

Prerequisite: There are no prerequisites for this class.

COMPUTER PROGRAMMING - Odd Years Only - 6139 - 0.5 credit

Grades 9-12

Learn how to program drawings, animations, and games using Javascript and ProcessingJS, and learn how to program webpages with HTML and CSS. You can share whatever you create, explore what others create, and learn from each other.

Prerequisite: There are no prerequisites for this class.

YEARBOOK - 190 - 1 credit

Full-Year Course Grades 9-12

This course is designed to produce a yearbook for the students of Southeastern High School. Students utilize a broad range of communication skills: marketing, graphic design, and composition. Counts as a fine art credit toward graduation.

Prerequisite: Instructor Permission

DIGITAL PHOTOGRAPHY - EVEN Years only - 6137 - 0.5 credit

GRADES 9-12

In this class, students will experience the digital side of photography. Numerous challenging activities will include composition and exposure of digital pictures and mastery of photo editing software. Students will acquire skills including manipulation of aperture and shutter speed for photographic results. Various types of photography may include, natural light, sports, astro, landscape, portraits and candids, still, and existing lighting. Lastly, there will be a design aspect to many of the photography projects, utilizing group collaboration to create a polished finished product.

Prerequisite: There are no prerequisites for this class.

AP COMPUTER SCIENCE PRINCIPLES - EVEN Years Only - 6318 - 1 credit

Grades 11-12

Computer Science Principles (CSP) curriculum is a full-year, rigorous, entry-level course that introduces high school students to the foundations of modern computing. The course covers a broad range of foundational topics such as programming, algorithms, the Internet, big data, digital privacy and security, and the societal impacts of computing. The course is designed for typical school settings with teachers in classrooms. All teacher and student materials are provided for free online.

Prerequisite: Computer Programming or Intro to Computer Science

INTRO TO COMPUTER SCIENCE - Even Years Only - 6122 - 0.5 credit

Grades 9-12

This class will focus on an introduction to the different programming languages such as HTML, Javascript, Python, C++, CSS, etc. Students will learn the basics of programming through a list of online lessons. The course takes a wide lens on computer science by covering topics such as programming, physical computing, HTML/CSS, and data. Students engage with computer science as a medium for creativity, communication, problem solving, and fun. The course inspires students as they build their own websites, apps, games, and physical computing devices.

21ST CENTURY TECHNOLOGY - Even Years Only - 6136 - 0.5 credit

Grades 9-12

This class will focus on different aspects of modern technology such as blogging, video editing, social media, news reporting, etc. Students in this class will help manage the Trojan Wall by writing news articles, posting video reports, managing the Trojan Wall blog, and running the Trojan Wall social media accounts. Students will learn how to use video editing software, photo editing software, digital cameras, write professional blog articles, and formulate a student newspaper using the combination of Chromebooks, iPads, mobile phones, digital SLR cameras, and more.

ENGLISH DEPARTMENT

ENGLISH 9 - 1121 - 1 credit

Grade 9

This course covers the common core standards, which include: reading, writing, listening, speaking, viewing, researching, and critical thinking. The course is composed of an introduction to a variety of literary genres including the short story, poetry, drama, and the novel. Summer reading is required.

ADVANCED ENGLISH 9 - 1122 - 1 credit

Grade 9

Exemplary performance in English 7 & 8 qualifies students for this fast-paced, advanced course. Units include: Short story, nonfiction reading, Ancient Roots & *The Odyssey*, *Romeo & Juliet*, and *To Kill A Mockingbird*. Summer reading is required.

ENGLISH 10 - 1221 - 1 credit

Grade 10

This course covers a broad range of skills including: reading, writing, listening, speaking, viewing, researching, and critical thinking. Students will read novels, short stories, and plays from around the world. Writing and research skills are emphasized. Preparation for graduation exams is also included in this course. Ohio's New Learning Standards are emphasized. Summer reading is required.

ADVANCED ENGLISH 10 - 1224 - 1 credit

Grade 10

This advanced course covers a broad range of skills including: reading, writing, listening, speaking, viewing, researching, and critical thinking. Students will read novels, short stories, and plays from around the world. Writing and research skills are emphasized. Preparation for graduation exams is also included in this course. This course moves at a quicker pace than English 10. Ohio's New Learning Standards are emphasized. Summer reading is required.

Prerequisite: A B average in Advanced English 9 or teacher recommendation is required.

ENGLISH 11 - 1310 - 1 credit

Grade 11

This American Literature and College Composition course covers a broad range of communication skills: reading, writing, listening, speaking, viewing and critical thinking. This course emphasizes vocabulary acquisition, grammar, and modern American literature. Common core standards are emphasized; summer reading, required. College Credit Available for English 1111 - 3 credits.

ADVANCED ENGLISH 11 - 1311 - 1 credit

Grade 11

This American Literature and College Composition course moves at a fast-paced providing the opportunity for students to earn six college credits and complete the college freshman English composition requirement. Students hone a broad range of communication skills: reading, writing, listening, speaking, viewing, researching, vocabulary acquisition, and critical thinking with an emphasis on college-level composition. Students may earn six Clark State College credits (English 1111 and 1112) for successfully completing this course and meeting score requirements on the COMPASS or ACT test. Summer reading required.

Prerequisite: A B average in Advanced English 10 or teacher recommendation is required.

ENGLISH 12 - 1410 - 1 credit

Grade 12

Read world literature and earn the second semester of required college composition (English 1112) in this college credit plus course. This course is writing intensive with an individualized pace. In addition to writing extensively, students read memoirs and classics including *The Glass Castle*, *Frankenstein*, and *The Kite Runner*.

AP ENGLISH 12 (LANGUAGE & COMPOSITION) - 1421 - 1 credit

Grade 12

Advanced Placement English is an advanced composition and rhetoric course. Included are selected novels, advanced vocabulary, college composition practice, and individual research. Registration is open to junior and senior students with a 3.25 G.P.A. and teacher/counselor recommendation. Summer reading and writing are required. The Advanced Placement English Test of the College Board is optional at the completion of the course. The fee for this test is approximately \$90 and is student paid. Summer reading and writing is required.

Prerequisite: A B+ average in Advanced English 11 is required.

FANTASY LITERATURE AND FILM - EVEN Years Only -1227 - .5 credits

Grades 9-12

This college prep course will include the study of fantasy literature and film. We will complete a study of the genre of fantasy, including foundational works of literature and film in the fantasy genre. There will be research projects and writing required. This course uses Ohio's New Learning Standards. Offered every other year.

FILM STUDIES - EVEN Years Only - 1134 - .5 credits

Grades 9-12

This college prep course will study the history of films and the many different genres in film. These genres include silent films, black and white films, western films, horror, action, comedy, and more. We will view partial and complete films and write reviews and analyses of these films. Research, reading, writing, and presentations should be expected throughout the course. This course uses Ohio's New Learning Standards. Offered every other year.

CREATIVE WRITING - .5 Credit**Grade 9-12**

Creative Writing will focus on expressive writing in many different forms. The course is designed for students to create original forms of descriptive writing, poetry, and fiction. We will study strategies to avoid writer's block and new ways to uncover ideas for writing. In addition to in-class writing exercises, creative exercises outside of class, and discussions, students will critique each other's writing in a constructive workshop atmosphere.

ARGUMENTATION & DEBATE - .5 Credit**Grades 9-12**

This course includes the study and practice of academic debate and argumentation. This course will emphasize critical thinking skills, analysis, and research techniques. Students will learn the fundamentals of argumentation and debate, including how to structure and organize their arguments and debates. Students will work on refining their skills in researching, argumentation, questioning, and rebuttal strategies. Skill focus also includes the development of techniques in diction, articulation, enunciation and projection. This course is designed to complement required English courses. Ohio's New Learning Standards in English Language Arts are used for this course.

SPORTS IN LITERATURE AND FILM**CREDIT .5****GRADES 11-12**

This college prep course uses Common Core Standards to prepare students for college and career. Students will study and learn about a variety of sports through novels, short stories, articles, poems, and films. Students will also be expected to write essays, give presentations, and study grammar and vocabulary. Offered every other year.

FINE ARTS DEPARTMENT

INTRODUCTION TO ART - 8110 - 0.5 credit

Grades 9-12

This course is designed to introduce students to the basic elements of art, principles of design, and color theory, as well as to develop an understanding of art careers and general art history. Students will obtain an overall view of the areas of art; drawing, painting, 3-dimensional, graphic design, and illustration. Many different materials and tools will be explored, such as, pencils, pens, fabrics, wood, paint, pastels, and ink. Students will experiment with a wide variety of art forms. Some library research is required.

Fees include sketchbook and basic supplies.

CRAFTS - 8112 - 0.5 credit

Grades 9-12

Create a variety of decorative and useful artworks, utilizing materials such as paper, paint, fabrics, fibers, clay, plaster, wood, and metal. Students will participate in hands-on activities and develop techniques and skills used by craftsmen all over the world. Explore various cultures through the creation of their traditional crafts. Some library research required.

Fees include basic supplies.

DRAWING/PAINTING - 8111 - 1 credit

Grades 9-12

Tackle the basics of drawing by examining objects and learn how to transfer what is real into a drawing surface. Many technical and design skills will be covered such as shading, proportion, perspective, composition, texture, value, and creating visual impact. Expand upon drawing skills to use various paint mediums: ink, watercolor, and acrylics. Learn special effect techniques and paint a wide variety of subjects including landscape, portraits, and still life. Develop blending, shading, and color mixing abilities. Some library research is required. Students will choose to draw or paint on each project. Many mediums will be explored such as pencils, pen and ink, charcoal, colored pencils, watercolors, acrylics, and oil paints. Some library research is required.

Prerequisite: It is recommended that a student take Intro to art before taking Drawing and Painting.

Fees include sketchbook and basic supplies.

CERAMICS/3-D DESIGN - 8113 - 1 credit

Grades 9-12

Basic facts about clay.....its personality and versatility as an art medium will be covered. Students will learn to make clay, prepare it, and submit design ideas for approval....then hand build three-dimensional art forms. Glazing and painting will also be covered and some library research is required. Through the use of various 3-D art materials, including paper-mache, plaster, and wire, students will experience and experiment with the total artistic process. Utilizing both creative and analytical thought processes students are called upon to design, problem solve, and manipulate various tools, materials, and mediums. It is recommended that a student take Crafts or Intro to Art before taking Ceramics. **Prerequisite for freshmen only:**

Art teacher approval

Fees include clay, glazes, and basic supplies.

ADVANCED CERAMICS - 8213 - 1 credit

Grades 10-12

Designed for students who have completed Ceramics/3-D Design. This course explores the endless possibilities of hand-built clay work, as well as wheel-thrown pottery. Students will also investigate other sculptural mediums such as plaster, wood, and fabrics. An emphasis is placed on creative ideas and use of imagination in 3-D work. Some library research is required. This is an independent class that takes place during the beginning Ceramics class. Student must be capable of working independently! **Prerequisite: B- or above in Ceramics/3-D Design.**

ADVANCED TWO DIMENSIONAL ART - 8214 - 1 credit

Grades 10-12

This course is designed for the art student who has taken Drawing and/or Painting courses, and wishes to continue with art experiences. Students will explore drawing and other 2-D art techniques such as painting, printmaking, calligraphy, and computer graphics. Materials used are typically those used in previous courses, but subjects become more involved, and students will be required to work more independently, developing a portfolio as a final result of the completed course work.

Prerequisite: C+ or above in Drawing/Painting

MUSIC DEPARTMENT

CONCERT BAND WITH MARCHING BAND - 8805 - 1.5 credit

Grades 9-12

This course will provide a large ensemble setting for students who wish to continue to develop both their own instrumental skills and that of an ensemble member interested in participating in both the Concert Band and Marching Band setting.

Concert Band - An ensemble devoted to the training of musicians in the improvement of musical skills, like tone quality and technical ability. Through the playing of concert music repertoire, students will also explore music theory, articulation, sight-reading, and other performance skills. Students will participate in concert performances throughout the year.

Marching Band - An ensemble devoted to developing a disciplined unit that will perform halftime shows for the football games as well as community parades and events. An effort is made to instill pride, cooperation, effective leadership, and personal confidence among the ensemble members. Students are required to participate in a one week pre-camp and one week band camp held in summer before the season begins as well as weekly practices throughout the fall.

Prerequisite for the class is completion of Jr. High Band or by director approval.

CONCERT BAND - 8801 - 1 credit

Grades 9-12

This course will be a Concert Band setting only option for students who wish to continue to perform on their instruments, and only perform during concert band season. Concert Band - An ensemble devoted to the training of musicians in the improvement of musical skills, like tone quality and technical ability. Through the playing of concert music repertoire, students will also explore music theory, articulation, sight-reading, and other performance skills. Students will participate in concert performances throughout the year.

Prerequisite for the class is completion of Jr. High Band or by director approval.

CONCERT CHOIR - 8802A or 8802B - 0.5 credit

Grades 9-12

The choir sings contemporary, sacred, and other musical literature spanning many various styles. The main objectives of the class are sight-reading, diction, enunciation, rhythm, and an appreciation of choral music. The choir participates in various concerts and civic events throughout the year. Participation in concerts and comparable activities is a required part of this course.

SYMPHONIC CHOIR - 8806A or 8806B - 0.5 credit

Grades 9-12

This course is for students who know the basics and want to sing more challenging songs than concert/women's choir. Those involved must be able to sight read, and pick up melody and harmony quickly. The class moves at a fast pace. Students must understand music-lingo and **MUST** have the ability to sing alone or in a quartet when asked. This choir participates in various concerts and civic events throughout the year. Participation in concerts and comparable activities is a required part of this course. **Prerequisite for the class is involvement in 2018-2019**

Symphonic Choir or by audition.

FOREIGN LANGUAGE DEPARTMENT

SPANISH I - 5421 - 1 credit

GRADES 9-12

This elementary course offers an introduction to Spanish language and culture with practice in the basic skills of the language. Students must have a strong work ethic and a willingness to study.

Suggested Prerequisite: A or B in English.

SPANISH II - 5422 - 1 credit

GRADES 10-12

A continuation of Spanish I which offers a more in-depth study of the fundamentals of the Spanish language. Culture again will be continuously blended in with the study of vocabulary and grammar

Prerequisite: Spanish I, earning a C or better for the second half of the course.

HONORS SPANISH III - 5423 - 1 credit

GRADES 11-12

This intermediate course offers a higher learning of the Spanish language and culture through advanced studies of the language. This course also provides an introduction to literature and the arts.

Prerequisite: Spanish II, earning a C or better for the second half of the course.

HONORS SPANISH IV - 5424 - 1 credit

GRADE 12

This advanced course offers the acquisition of a complex vocabulary and the study of complex grammatical concepts of the Spanish language. Current events, as well as film, art, literature, and dialectology will be studied in this course.

Prerequisite: Spanish III, earning a C or better for the second half of the course.

HEALTH AND PHYSICAL EDUCATION DEPARTMENT

HEALTH - 7211 - 0.5 credit

Grades 9-12

The basic areas of study are:

- Personal Health - exercise, diet, rest, hygiene.
- Safety and First Aid - fire/tornado rules, burns, shock, CPR, and other first aid treatments.
- Family and Social Health - friendships, family living, aging, decision making, abuse.
- Nutrition - food groups, nutrients.
- Growth and Development - body systems, reproduction, birth control, STD's Pregnancy, personal values.
- Mental and Emotional Health - self-concept, personality, behavior, values, suicide.
- Substance Abuse - alcohol, tobacco, substance abuse, drinking and driving, treatment, including a DARE Program coordinated with the Clark County Sheriff's Department.
- Disease and Disorders - transmission, communicable and non-communicable disease.
- Consumer Health - career, media, health care.
- Community and Environmental Health - services, population, pollution.
- Series on teen violence.

PHYSICAL EDUCATION - 7100 - 0.25 credit

Grades 9-12

Physical Education is concerned with educating the total individual to his/her highest potential. The physical objectives are achieved through participation in both small and large muscle activities. Emphasis on good sportsmanship, fair play, and teamwork attempts to fulfill the social-emotional objective. The activities aim to give the student a favorable attitude concerning lifelong physical fitness, to contribute to the development of fundamental skills for both vigorous sport activities and leisure time activities, and to guide in the development of good citizenship.

Team and Individual Activities (Co-Educational)

Soccer	Flag Football	Aerobic Exercise
Kickball	Speedball	Corn Hole
Dodgeball	Basketball	Ping Pong
Wiffle Ball	Volleyball	Indoor Soccer

Cardiovascular

Personal Fitness	Conditioning
Skill	Weight room
Exercise	Flexibility

PE WAIVER - 7112 - 0 CREDIT

Grades 9-12

NEED DESCRIPTION

INDUSTRIAL TECHNOLOGY DEPARTMENT

INTRODUCTION TO ENGINEERING DESIGN - PLTW - 8127 - 1 credit

Grades 9-12

This course emphasizes the development of a design from an engineering standpoint. Students will use a problem-solving model to improve existing products and invent new ones. Computer software is utilized to produce, analyze, and evaluate the problem and design solution. State of the art technology will be used to translate conceptual design into reproducible products. Emphasis will be placed on the design process, team approaches, adaptive design concepts, interpretation, mass property calculations, cost analysis, and marketing.

This class may earn college credits from Clark State which may be articulated to other colleges and universities.

CIVIL ENGINEERING & ARCHITECTURE - 8126 - 1 credit

Grades 10-12

This course introduces students to the fields of Civil Engineering and Architecture, with an emphasis on residential design and commercial buildings and applications. The class demonstrates the interrelationship and dependence of both fields on each other. Students will be using state of the art software to solve real world problems and communicate solutions for hands on projects and activities. Some of the activities include:-landscaping-soil investigation-structural beam analysis and design-building codes & systems-utilities-low impact development-topography-site analysis.

Prerequisite: Completion of Introduction to Engineering Design with a C+ or better.

This class will earn college credits from Clark State which may be articulated to other colleges and universities.

DIGITAL ELECTRONICS - PLTW - 8130 - 1 credit

Grades 11-12

This course introduces students to applied digital logic, a key element of careers in engineering and engineering technology. It also explores the smart circuits found in watches, calculators, video games, and computers. Students use industry-standards computer software in testing and analyzing digital circuitry. Students will begin with a study of basic electrical theory then move on to learn the basic principles and theories of digital circuits. Students use mathematics and science in solving real-world engineering problems. This course covers several topics, including:

- Analog and digital fundamentals
- Number systems and binary addition
- Logic gates and functions
- Boolean algebra and circuit design
- Decoders, multiplexers and de-multiplexer

PRINCIPLES OF ENGINEERING - PLTW - 8129 - 1 credit

Grade 12

This course is intended to help students understand the vast field of engineering and technology. They will explore the wide variety of technology and manufacturing processes using activities, projects and problems. Students learn first hand how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people. The course also includes concerns about social and political consequences of technological change.

This class may earn college credits from Clark State which may be articulated to other colleges and universities.

INTRO TO WOODWORKING - 8128 - .5 CREDIT

Grade 9-12

This course gives the student first-hand experience in designing and building custom- made manufactured products using wood as the primary source of material. Students will learn how to follow laboratory safety guidelines and encourage their peers to perform all activities in a safe manner. Also, the student will learn how to figure board feet, identify the parts of a board, identify common hardwoods and softwoods, identify common hand woodworking tools, understand and use some of the power machinery in the laboratory. Mass production methods are utilized and management skills are sharpened un the 2nd half of the class. This course is not designed to make the students ready to be cabinetmakers, but to give them a broad knowledge of woodworking.

HOME IMPROVEMENT AND REPAIR

GRADES 9 – 12

No, I am not Tim Allen, but you aren't Al or Heidi either. And you're too young to remember this show anyways. In spite of that, we will delve into survival skills needed around the house and vehicles. Our goal is not going to be to overhaul your engine or build an addition onto your house, but rather how to take care of the everyday nuisances that you end up saying "I wish I knew how to do that myself." Areas that we will be exploring will include: automobile, home plumbing, electrical, drywall, small appliances, refinishing furniture, safety, and other areas.

MATH DEPARTMENT

CORE STANDARDS MATH

ALGEBRA 1A - 3231 - 1 credit

Grade 8

This course teaches the foundations of algebra, solving equations and inequalities, relations and functions, linear relationships, and systems of equations. Algebraic reasoning will be developed. In this course the foundations for understanding science and higher level mathematics will be laid. The aim of this course is to analyze a problem situation, translate it into mathematical language, and then use algebraic skills to solve it.

Prerequisites: Successfully completed 7th Grade Math

ALGEBRA 1B - 3331 - 1 credit

Grade 9

This course continues the study of the foundations of Algebra. The course teaches an understanding of Algebra through various types of functions. The course content covers exponents and polynomials, factoring, quadratic functions, data analysis and probability, exponential and radical functions, and rational functions. The aim of this course is to analyze a problem situation, translate it into mathematical language, and then use algebraic skills to solve it. Graphing calculator is recommended.

Prerequisites: Successfully completed Algebra 1A

GEOMETRY - 3211 - 1 credit

Grade 10

This course teaches basic structure of geometry, plane and solid, and uses and strengthens algebraic skill. It also develops an understanding of deductive proofs. The course covers elements of geometry, induction, deduction and proof, angle relationships and perpendicular lines, parallel lines and planes, congruency and similarity, circles, construction and loci, coordinate geometry, and areas and volume.

Prerequisites: Successfully completed Algebra 1 or Algebra 1A & B

ALGEBRA II - 3311 - 1 credit

Grade 11-12

This course teaches an understanding of Algebra as a study of the systems of real and complex numbers. Course content covers axioms, open sentences in one variable, linear equations, and systems, polynomials and factoring, relations and functions, irrational numbers and quadratic equations, quadratic relations and systems. Use of a graphing calculator is introduced and applied.

Prerequisites: Successfully completed Geometry

MATHEMATICS MODELING AND REASONING -3314 - 1 Credit

Grade 11-12

NOT OFFERED AT THIS TIME

This course is designed to promote reasoning, problem-solving and modeling through thematic units focused on mathematical practices while reinforcing and extending content in Number and Quantity, Algebra, Functions, Statistics and Probability, and Geometry. Quantitative reasoning and modeling involve the application of mathematics to real-world situations, with careful attention to the choice of units and contextual challenges. Problem-solving requires analyzing an unfamiliar situation and devising a solution strategy. Problem-solving and modeling together provide opportunities for students to experience success with mathematics, not merely improve their self-perception. These habits and skills promote perseverance and cut across disciplines, thus providing a gateway into successful postsecondary education and a variety of careers.

Prerequisite: Algebra 2 or its equivalent Time frame: One year Grades: 11-12

MATHEMATICS / 4 CREDITS REQUIRED WITH ALG II ACCELERATED MATH

ALGEBRA I - 3111 - 1 credit

Grade 8

Algebra I is the study of mathematics that introduces the concept of a variable and the skills used to work with expressions containing variables. It is the foundation for further study of mathematics and science. The aim of this course is to analyze a problem situation, translate it into mathematical language, and then use algebraic skills to solve it. A graphing calculator is needed for this course.

Prerequisite: Final grade of B or higher in seventh grade math and a qualifying score on an algebra screening assessment for freshmen.

ADVANCED GEOMETRY - 3212 - 1 credit

Grade 9

This course teaches basic structure of geometry, plane and solid, and uses and strengthens algebraic skill. It also develops an understanding of deductive proofs. The course covers elements of geometry, induction, deduction and proof, angle relationships and perpendicular lines, parallel lines and planes, congruency and similarity, circles, construction and loci, coordinate geometry, and areas and volume.

Prerequisites: Successfully completed Algebra 1

ADVANCED ALGEBRA II - 3312 - 1 credit

Grade 10

This course teaches an understanding of Algebra as a study of the systems of real and complex numbers. It enables the student to perceive the role of deductive reasoning in Algebra. Course content covers axioms, open sentences in one variable, linear equations, and systems, polynomials and factoring, relations and functions, irrational numbers and quadratic equations, quadratic relations and systems, complex numbers, logarithms, trigonometry, and matrices. Use of a graphing calculator is needed for this course.

Prerequisites: Successfully completed Algebra 1 & Geometry or Algebra 1A&B &

Geometry with a final grade of a B or higher or recommendation from the teacher.

ALGEBRA III - 3333 - 1 credit

GRADES 11-12

This course is designed for students who have completed Algebra I, Algebra II, and Geometry. This course will review and extend algebra and geometry topics and their applications. At the end of this course the student should be able to graph and evaluate functions, find the model of a function, transform graphs and functions, identify and use trigonometric relationships, in addition to solving problems involving roots, logarithms, exponents, sequences, polynomials, combinations and probability. The course is designed for the student wanting more preparation before taking pre-calculus or college mathematics.

Prerequisite: Algebra I, Algebra II, and Geometry earning a C or better for the second half of the courses.

HONORS PRE-CALCULUS - 3411 - 1 credit

Grade 11

This course presents and develops all the necessary topics for a pre-calculus course. This course covers complex numbers, functions (algebraic, logarithmic, and exponential), some analytic geometry, trigonometry, vectors, and advanced topics in curve sketching. It also introduces students to beginning topics of calculus including limits. Graphing calculator required.

Prerequisites: Successfully completed Algebra 2

AP CALCULUS - 3461 - 1 credit

Grade 12

Mathematics course covering the beginning topics of calculus. The study of elementary functions includes properties of functions and limits. Differential calculus study involves the derivative and applications of the derivative. The course concludes with the study of integral calculus, which includes antiderivatives and their applications, techniques of integration, the definite integral, and applications of the integral. The semester exam is required for this course. A graphing calculator is needed for this course.

Prerequisites: Pre-Calculus or Algebra II (with recommendation from the teacher)

AP PROBABILITY & STATISTICS - 3412 - 1 credit

Grade 12

The purpose of the AP course in statistics is to introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data .

Students are exposed to four broad conceptual themes:

- 1 . Exploring Data: Describing patterns and departures from patterns
- 2 . Sampling and Experimentation: Planning and conducting a study
- 3 . Anticipating Patterns: Exploring random phenomena using probability and simulation
- 4 . Statistical Inference: Estimating population parameters and testing hypotheses

The semester exam is required for this course. A graphing calculator is needed for this course.

Prerequisites: Successfully completed Algebra 2 and/or Pre-Calculus or Algebra III

SCIENCE DEPARTMENT

PHYSICAL SCIENCE - 4111 - 1 credit

Grades 8-10

Physical science is generally an eighth & ninth grade course covering the topics of matter and energy, spaces and earth science. Energy topics of motion, electromagnetic waves, and thermal energy are emphasized. Concerning matter, the study of elements and compounds, their structures, properties and relationship to the periodic table of elements will be emphasized. How the topics in matter and energy affect our earth and space will drive the content of the earth and space science units. This course has a strong emphasis on preparation for the science portion of the OGT.

PHYSICAL GEOLOGY - 4213 - 1 credit

Grades 9-12

An overview of Earth's materials, processes and structures within a plate tectonics framework: origin and structure of the earth, rocks and minerals, geologic time, fossils and evolution, earthquakes and volcanoes, ocean basins, formation of landscapes and geologic history. Physical geology incorporates chemistry, physics, life science and environmental science and introduces students to key concepts, principles and theories within geology. This course is designed to meet the Ohio Core Physical Geology Academic Content Standards.

BIOLOGY - 4210 - 1 credit

Grades 9-10

An overview of the characteristics of living things including the Characteristics & Structure of Life, Heredity, Diversity & Interdependence of Life, Evolutionary Theory, & Historical Perspectives & Scientific Revolutions with the integration of concepts from Earth & space sciences and physical sciences. This course is designed to meet the Ohio Core Biology Academic Content Standards.

Lab Fee

ENVIRONMENTAL SCIENCE - 4110 - 1 credit

Grades 10-12

Environmental Science is a course, which studies the ecological concerns of the environment. It investigates how nature sustains life and will also discuss human's detrimental effects on our environment. The biological concepts behind these issues will be emphasized.

Prerequisite: General Physical Science and Biology

ADVANCED BIOLOGY - 4211 - 1 credit

Grades 9-11

An overview of the characteristics of living things including the Characteristics & Structure of Life, Heredity, Diversity & Interdependence of Life, Evolutionary Theory, & Historical Perspectives & Scientific Revolutions with the integration of concepts from Earth & space science and physical sciences. This course is designed to meet and exceed the Ohio Core Biology Academic Content Standards by developing skills necessary for success at the collegiate level. **Lab Fee**

CHEMISTRY - 4311 - 1 credit

Grades 10-12

Chemistry is a fundamental science recommended for all students planning to attend college or related fields in a technical school. Chemistry involves an in-depth look at the study of matter. Concepts covered will include classifying matter, changes in matter, mole concept, the periodic table, gases laws, organic chemistry, acid and bases.

Prerequisite: One year of Algebra I and one year of any other college-prep science with a "C" or better average in both. Lab fee. College in the Classroom (CITC) credit is available through Clark State with student payment of tuition.

HONORS ANATOMY AND PHYSIOLOGY - ODD Years Only - 4463 - 1 credit

Grades 10-12

Anatomy & physiology is a systematic study of the structure and function of human beings. It explores basic cytology, histology, and the eleven vertebrate systems and the interrelationships among them. The course provides a comprehensive lab experience including vertebrate dissection techniques.

Prerequisite: C or Better in Advanced Biology or the instructor's written permission.

Offered alternate years with Honors Advanced Biology. Lab Fee

HONORS ADVANCED BIOLOGY II - EVEN Years Only - 4312 - 1 credit

GRADES 11-12

Advanced Biology is taught on a pre-college level, stressing modern scientific theories, research, oral reports and laboratory experiments. An independent project is required. Areas of study are microbiology, invertebrate & vertebrate zoology, botany, genetics, biochemistry, and evolution.

Prerequisite: C or better in Advanced Biology I or instructor's written permission.

Offered alternate years only, alternating with Honors Anatomy and Physiology. Lab fee.

HONORS PHYSICS - 4411 - 1 credit

Grades 11-12

Physics is designed primarily for college-bound students. Basic concepts and principles of physics are presented. In addition, laboratory investigations, problem solving, and discussion questions are used to stimulate observation and scientific inquiry. Specific topics covered include mechanics, heat, electricity and magnetism, the energy of waves, and modern physics.

Prerequisite: Completion of Algebra II and Chemistry or concurrent registration.

SOCIAL STUDIES DEPARTMENT

AMERICAN GOVERNMENT - 2421 - 1 credit

Grades 11-12

The study of the American political system. The areas covered are state, local, and national government. All three branches of government are covered: legislative, executive, and judicial, and their powers. An in-depth look at the Constitution and Bill of Rights. Major economic concepts will also be covered as they apply to our political system.

WORLD HISTORY (formally SSI) - 2121 - 1 credit

Grades 9-12

This social studies course will engage students in interpreting information, evaluating world events, and analyzing concepts from the various fields of social studies of the time period beginning in the 17th century to the present. Major points of emphasis will include the Enlightenment, the French Revolution, the Industrial Revolution, Nationalism, Imperialism, and both World Wars, and the Cold War. The class will emphasize concepts and skills as determined by the State of Ohio standards.

AMERICAN HISTORY (formally SSII) - 2221 - 1 credit

Grades 10-12

This social studies course will engage students in interpreting information, evaluating events, and analyzing concepts from the various fields of social studies during the time period from 1877 to the present. Major units of study will include Industrialization, the Progressive Movement, the Spanish American War, World War I, the Roaring 20's, The Great Depression, World War II, the Cold War, the Civil Rights Movement, and the Vietnam War. The class will emphasize Common Core concepts, skills and standards as determined by the State of Ohio.

AP U.S. HISTORY - 2423 - 1 credit

Grades 11-12

This class is equivalent to a full-year introductory college course in United States history on the period from the first European explorations of the Americas to the present. The course combines a general survey of American history with in-depth analysis of critical events, themes, and persons. The goals of an advanced placement class include: to prepare for the AP Examination in United States history as prepared by the College Board; to reinforce study skills and to encourage students who are assumed to possess a high degree of motivation to test the limits of their intellectual capacities; and, to create a greater awareness of both the world role of a major nation and the individual role of a responsible citizen. The Advanced Placement U.S. History Test of the College Board is mandatory at the completion of the course. The fee for this course is approximately \$90 and is student paid. The semester exam is required for this course.

Prerequisite: Registration is open to juniors and seniors who have successfully completed Social Studies I, Social Studies II and Government with an "A" in all three courses; teacher/counselor recommendations may be required upon request.

PSYCHOLOGY - EVEN YEAR - 2311 - (.5)

Grades 9-12

The study of the ways in which people's thoughts, feelings, and behaviors are affected by other people and their environment. Topics include perception, emotions, human development and personality development. The class will emphasize Common Core concepts, skills and standards as determined by the State of Ohio. This class is recommended for college-prep students.

GLOBAL AWARENESS - EVEN YEAR - 2111 - (.5)

Grades 9-12

This course is designed for students to study and examine local, state, national, and international events. The course will combine television, newspapers, magazines, and research to help students understand what is happening, why it is happening, and possible effects of these events. The class will emphasize Common Core concepts, skills and standards as determined by the State of Ohio.

WORLD GEOGRAPHY - EVEN YEAR - 2116 - (.5)

Grades 9-12

This course provides opportunities for students to study the basic geography, economy, and natural resources of the seven continents. These regions are studied in relationship to the United States and the problems facing our nation in today's global society.

19th CENTURY US HISTORY - EVEN YEAR - 2425 - (.5)

Grades 9-12

This class will cover American history from 1800-1899. Major topics will include; The War of 1812, The Mexican-American War, Civil War, Reconstruction, Westward Expansion, Spanish American War. The course will also cover major inventors including, Eli Whitney, Samuel Colt, Thomas Edison..... This class will also have lab days which will give students the opportunity to make 19th century foods and use tools and technologies first developed at this time in American history. The course will also detail the way of life of the Plains Indians and their interaction with white Americans with the Transcontinental Railroad and destruction of Bison herds toward the end of the 19th Century. The course will wrap up with a look at the Frontier Thesis written by Frederick Jackson Turner.

MODERN WORLD HISTORY IN THE MOVIES - ODD YEAR - 2117 - .5 credit

Grades 9-12

This social studies course will engage students in interpreting information, evaluating world events, and analyzing concepts concerning world events of time period beginning in the 17th century to the present as presented in films. A partial list of the films to be included: *A Tale of Two Cities*, *Zulu*, *Judgment at Nuremberg*, *Dr. Strangelove*, and *We Were Soldiers*. The class will emphasize concepts and critical thinking skills as determined by the State of Ohio and Common Core standards.

SOCIOLOGY - ODD YEAR - 2115 - .5 credit**Grades 9-12**

This course is designed as an introduction to sociological concepts and issues. Students will examine various aspects of human relationships, which include items such as: family life, dating, work career, and personal growth. The class will emphasize Common Core concepts, skills and standards as determined by the State of Ohio. This class is recommended for college-prep students.

CIVIL WAR AND RECONSTRUCTION - ODD YEAR - 2426- .5 credit**Grades 9-12**

This class will focus on the United States Civil War years and the period of time following the war known as Reconstruction. Causes of the war including; states rights, slavery, taxation and cultural differences between the North and South will be explored. Students will learn about major battles of the war, types of weapons used by each side, major figures of the war like Abraham Lincoln and Ulysses S. Grant. Reconstruction topics will include; the Jim Crow Era, Civil War Constitutional Amendments as well as the New South and the importance of cotton as an agricultural product.

THE VIETNAM ERA - ODD YEAR - 2427 - .5 credit**Grades 9-12**

This class will take a focused view of The United States of America during the years of the Vietnam War. Topics will include: causes of the war, the increased role of the United States during the Presidencies of Kennedy, Johnson, and Nixon, major battles of the war, as well as weapons and technologies used during the war. The course will also explore the large counterculture created by the war and use of music from the era and films about the war to help with student enrichment about the Vietnam Era.

AGRICULTURAL EDUCATION/BUSINESS AND PRODUCTION SYSTEMS

All students in ANY Ag Course WILL be required to maintain a project and keep records in at least one or more of the following areas; failure to do so will result in an incomplete/failure for the course:

- small and large animals (steers, chickens, rabbits, hogs, dairy, lambs, etc.)
- crops (corn, soybeans, wheat, hay, etc.)
- vegetable gardens, orchards, etc.
- exotic projects such as maple syrup, honey bees, Christmas trees, etc.
- job placement in an ag-related business
- other options with approval of instructor (e.g. research, ag. business, agscience fair, etc.)

All courses are 1.25 credits (pending completion of a project as outlined above).

AGRICULTURE, FOOD AND NATURAL RESOURCES - 8131- 1.25 credit

Grades 9-11

This first course in the career field is an introduction to Agricultural and Environmental Systems. They will examine principles of food science, natural resource management, animal science & management, plant & horticultural science, power technology and bioscience. Students will examine the FFA organization and Supervised Agricultural Experience programs. Throughout the course, students will develop communication, leadership and business skills essential to the agriculture industry.

ANIMAL & PLANT SCIENCE - 8141 - 1.25 credit

Grades 10-12

Students will apply knowledge of animal and plant science to the agriculture industry. They will be introduced to the value of production animals relative to the agricultural marketplace. Students will engage in animal classification and selection, body systems, along with animal welfare and behavior in relation to the production of animals. Students will learn principles of plant anatomy and physiology, and the role of nutrition, deficiencies and growing environment on plant production. Throughout the course, business principles and professional skills will be examined.

Prerequisite: Agriculture, Food and Natural Resources

ANIMAL HEALTH - ODD Years Only - 8146- 1.25 credit

Grades 10-12

Students will examine causes, symptoms, and treatment of common diseases with emphasis on developing preventative health management plans. Topics will include the study of pathogens, and classifying types of diseases and disorders. Students will perform animal health assessments and compare to standard characteristics. Throughout the course, students will utilize principles of technology to manage information systems, and research issues affecting the industry.

Pre-requisite: Agriculture, Food and Natural Resources

LIVESTOCK AND MEAT SCIENCE- ODD Years Only -8133- 1.25 credit

Grades 10-12

Students will identify and apply principles and routine husbandry practices to production animal populations. Topics will include principles of nutrition, feed utilization, animal welfare, selection and management of facilities and herd populations.. Students will apply knowledge of production animal care to enhance animal growth, selection of breeding stock, and management practices. Throughout the course, students will develop management plans reflecting practices for care and legal compliance. **Prerequisite: Agriculture, Food and Natural Resources**

SCIENCE AND TECHNOLOGY OF FOOD - ODD Years Only - 8148 - 1.25 credit

Grades 10-12

This first course in the pathway examines the research, marketing, processing and packaging techniques applied to the development of food products. Learners will examine principles of food preservation techniques and determine correlations to food sensory, shelf life and food stability. Learners will examine and develop food safety, sanitation, and quality assurance protocol. Government regulations and food legislation will be examined and the implications to food science and technology will be identified.

Prerequisite: Agriculture, Food and Natural Resources

ANIMAL & PLANT BIOTECH - 8150 - (1.25)

Grades 10-12

Prerequisite: Agriculture, Food and Natural Resources

Learners will apply principles of chemistry, microbiology and genetics to plant and animal research and product development. Students will apply genetic principles to determine genotypes and phenotypes. Students will describe the parts and functions of animal and plant cells and their importance in biochemistry. They will perform restrictive enzyme digests, Polymerase Chain Reactions and apply principles of nucleic acid blotting. This course will examine applications of Central Dogma Theory and other Molecular-Genetics Technologies.

AGRONOMIC SYSTEMS - 8139 - 1.25 credit

Grades 10-12

Students will apply knowledge and skills required to research, develop, produce and market major agricultural and horticultural crops. Cultural and sustainable production practices will be examined while students apply scientific knowledge of plant development, nutrition and growth regulation. The knowledge and skills needed to manage water, soils, and pests related to agronomic crops will be assessed. Students will employ technological advances, communication, business, and management strategies appropriate for the industry. This will also include a unit on precision agriculture.

Prerequisite: Agriculture, Food and Natural Resources

ENV. SCIENCE FOR AG. & NAT. RESOURCES - EVEN Years Only - 8145 - 1.25 credit
Grades 10-12

Students will study relationships between organisms and their environment. Principles of biogeochemical cycles, air-water-land relationships, non-point pollution, and wetlands will be applied. Students will examine fundamentals of resource development, agriculture sustainability, energy needs and pollution control. They will analyze and interpret data gathered from studies on the ecosystem. Throughout this course, students will develop responses to environmental problems and develop management strategies for responsible conservation and resource development.

Prerequisite: Agriculture, Food and Natural Resources

MEAT SCIENCE & TECHNOLOGY - ODD Years Only - 8151 - 1.25 credit
Grades 10-12

Students will apply food chemistry and microbiology to processing, preservation, packaging, storage and marketing of meat products. Students will design and implement a quality assurance program that meets legal compliance and demonstrates knowledge of safe operation and maintenance of equipment and facilities. Students will evaluate carcass composition, assign quality grades, and examine valued-added products. Throughout the course, students will demonstrate customer service and sales techniques while understanding the scope and importance of business and safety regulations.

Prerequisite: Agriculture, Food and Natural Resources

MECHANICAL PRINCIPLES - ODD Years Only - 8152 - 1.25 credit
Grades 10-12

Students will engage in the mechanical principles utilized in animal and plant production systems. They will learn electrical theory, design, wiring, hydraulic and pneumatic theory, along with metallurgy in relation to hot and cold metals. Students will apply knowledge of sheet metal fabrication applicable to the agricultural industry along with identify, diagnose, and maintain small air-cooled engines. Throughout the course, students will learn critical components of site and personal safety as well as communication and leadership skills.

Prerequisite: Agriculture, Food and Natural Resources

BUSINESS MGMT. FOR AG. & ENV. SYSTEMS - 8147 - 1.25 credit
Grades: 10-12

Students will examine elements of business, identify organizational structures and apply management skills while developing business plans, financial reports and strategic goals for new ventures or existing businesses. Learners will use marketing concepts to evaluate the marketing environment and develop a marketing plan with marketing channels, product approaches, promotion and pricing strategies. Throughout the course, students will apply concepts of ethics and professionalism while implications of business regulations will be identified.

Prerequisite: Agriculture, Food and Natural Resources

ANIMAL ANATOMY & PHYSIOLOGY - EVEN Years Only - 8132 - 1.25 credit
Grades: 10-12

Students will examine the structure and function of the major organ systems as well as the function and principle of blood flow in animals. Students will study internal and external anatomical parts, their functions, and will investigate the relationship among these parts and systems within the body of the animal. Throughout the course, students will apply the internal

functions of anatomical structures to the business and industry principles of the animal industry.

FAMILY AND CONSUMER SCIENCE DEPARTMENT

CAREER AND COLLEGE READINESS - 8115 - .625 credit

Grade 9

In this course, students will develop effective learning strategies and skills to provide a strong foundation for successful lifelong learning. Throughout the course, students will research careers and occupations, review postsecondary admissions qualifications, develop interviewing skills and participate in internships. Additional topics will include principles and techniques of professionalism, networking, conflict-resolution, negotiation, leadership and entrepreneurship. Required action projects promote service learning, leadership development and career exploration.

PRINCIPLES OF FOOD - 8309 - .625 credit

Grades 9-12

In this course, students will gain knowledge in food selection criteria and apply preparation methods to promote a healthy lifestyle. Students will apply cooking methods, ingredient selection and nutritional information in the context of selected food dishes. Throughout the course, basic food safety and sanitation techniques will be emphasized.

Action projects, which extend learning from the classroom to the home and community, are required.

CONSUMER ECONOMICS - 6318 - .5 credit

Grades 11-12

In this course, students will study public policy and consumer behavior related to consumer economics. Throughout the course, students will examine laws and regulations that affect the consumer. Additional topics will include consumer expenditures, consumer fraud, global economy, large purchases, and contracts.

TEXTILE AND INTERIOR DESIGN - 8312 - .625 credit

Grades 9-12

In this course students will explore a broad range of topics relating to the various aspects and career opportunities available in the field of textiles and design. The emphasis will be given to textiles project development and developing strategies to maintain the home. Additional topics will include project collaboration, design techniques and environmental sustainability. Action projects, which extend learning from the classroom to the home and community, are required.

LEADERSHIP AND COMMUNITY ENGAGEMENT - 8135 - 1.25 credit

Grades 11-12

In this course, students will learn how to become an active community member and citizen. An emphasis will be placed on in-service learning, leadership training and teambuilding opportunities. Additional topics will include public policy issues, community and global engagement. Action projects, which extend learning from the classroom to the home and community, are required.

TRANSITIONS - 8319 - .625 credit

Grades 10-12

This class will explore transitions from high school to adult life with the study of relationships and life planning skills, along with involvement in leadership strengthening activities. Topics and activities will include: goal setting, planning & time management skills for education, work & family life goals; coping with stress of change; conflict resolution; healthy interpersonal relationships; responsible citizenship; communication; and multicultural awareness. Action projects, which extend learning from the classroom to the home and community, are required.

CHILD DEVELOPMENT - ODD YEAR - 8317 - .625 credit

Grades 11-12

In this course, students will study the principles of child growth, development and behavior. An emphasis will be placed on the cognitive development of a child and sensory and motor skills. Additional topics will include childhood diseases, immunizations, theories of development, learning styles and evaluating child care services.

Action projects, which extend learning from the classroom to the home and community, are required.

GLOBAL FOODS - ODD YEAR - 8231 - .625 credit

Grades 10-12

In this course, students will compare cuisines, ingredients and preferred cooking methods of various cultures. The influence of traditions and regional and cultural perspectives on food choices and culinary practices will be emphasized. Students will examine the issues and conditions that affect the availability and quality of food in the global market, and apply advanced cooking techniques, including the use of specialty and advanced equipment in the preparation of food dishes. Action Projects, which extend learning from the classroom to the home and community, are required.