FIRELANDS HIGH SCHOOL

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2024 - 2025 COURSE SELECTION GUIDE

Contents

WELCOME TO FIRELANDS HIGH SCHOOL

This booklet has been compiled through the efforts of the entire faculty here at Firelands High School. It is our hope that you will use this information to help you plan your personal course of study and that you will enjoy a successful four years with us.

PLAN NOW

Planning is a very important first step. To help you establish your course of action for the next four years, the following suggestions are offered:

1. Consider what is of interest to you and try to take courses that will increase your knowledge in your interest areas.
2. Be realistic about your abilities and aptitudes.
3. Take the opportunity to expand your interests and skills. Make the most of what is available to you.
4. Be prepared to take responsibility for yourself and your actions.
5. Consider the basic courses that must be taken to meet high school graduation requirements and those required by the colleges and technical schools of your choice.
6. Discuss with your teachers, counselor, and parents the courses they suggest you take each year, but remember you are the one who will do the work.

You are a unique individual. Choose a plan that will help you reach your own goals. A proper plan will help you gain knowledge, satisfaction, and happiness.

MINIMUM REQUIREMENTS FOR GRADUATION FROM FIRELANDS HIGH SCHOOL
THE REQUIREMENTS OF THE OHIO CORE AND THE FIRELANDS BOARD OF EDUCATION IN ORDER TO GRADUATE

Twenty-three (23) units of credit and see below for class specific testing requirements

The requirements are:

English	4 credits (must include English I, II, III, IV)
Social Studies	4 credits (must include World Studies, U.S. History, Government)
Mathematics	4 credits (must include one unit of Algebra II)
Science	4 credits (must include Biology)
Health	1/2 credit
Physical Education	1/2 credit
Fine Arts	1 credit
Financial Literacy	1/2 credit
Electives	minimum of 4.5 credits

Vocational requirements are: (Also includes students who complete a Senior Only program of 3 Vocational Credits at the JVS)

English	4 credits (must include English I, II, III, IV)
Social Studies	3 credits (must include World Studies, U.S. History, Government)
Mathematics	4 credits (must include one unit of Algebra II)
Science	3 credits (must include Biology)
Health	1/2 credit
Physical Education	1/2 credit
Financial Literacy	1/2 credit
Vocational Program	6 credits (Only 3 for Senior Only Program)
Elective	0.5 credit

Under Firelands Local Schools policy JECBC-R, a student must be enrolled full-time in their last four semesters and meet all other graduation requirements as set forth by the Firelands Local School Board and the Ohio Department of Education to qualify for a Firelands Local Schools Diploma.

FULL-TIME STATUS - Students in grades 9, 10 and 11 must take a minimum of the equivalent of 6.0 credits per year (5.75 if taking Physical Education course). Students who have 12th grade standing must take a minimum of 5.0 credits per year. Credits earned are a combination of courses taken at FHS, the LCJVS, or a CCP program. All students in grades 9-12 are required to enroll in four credits of core courses per year at Firelands High School. Core is defined as English, Math, Science, and Social Studies. This rule may be modified due to the special circumstances of a student's academic program and previous credits earned.

GRADUATION REQUIREMENTS

Graduation requirements consist of three parts, which must all be met to fulfill the requirements to receive a high school diploma in the State of Ohio.

Part 1 – Basics – Each student must earn 23 credits, and meet the requirements of the Firelands Local School District, as described above in earning credits in meeting graduation requirements in English, Mathematics, Science, Social Studies, Health, Physical Education, and Elective Credit. Students attending the Lorain County JVS must meet their Vocational Requirements, as described above.

Part 2 – Competency – Students must earn a passing score on Ohio's End-of-Course school Algebra I and English II tests. Students who do not pass at least one of these tests will be offered additional support and must retest in the failed area at least once. If they cannot pass this test after additional support, they can use one of the following three pathways to meet the Part 2 requirement:

1. Demonstrate Two Career-Focused Activities, at least one being Foundational
2. Enlist in the Military – Must show evidence
3. Earned credit for one college-level math or college-level English course through College Credit Plus
4. Earn a remediation free score on the SAT or ACT

Part 3 – Show Readiness – Earn two Seals from the list below, at least one must be Ohio-designated. Some of these Seals will only be available at the LCJVS.

1. Ohio Means Jobs Readiness Seal: Meet the requirements and criteria established for the readiness seal, including demonstration of work-readiness and professional competencies.
2. Industry Recognized Credential: Earn a 12-point approved industry-recognized credential or group of credentials totaling 12 points in a single career field.
3. College-Ready: Earn remediation-free scores on the ACT or SAT. Visit the Department's website to see current remediation-free scores.
4. Military Enlistment: Provide evidence that a student has enlisted in a branch of the U.S. Armed Forces; or participate in an approved JROTC program.
5. Citizenship: A student must satisfy state requirements for both American History and American Government through testing or appropriate coursework.
6. Science: A student must satisfy state requirements for Biology or an Advanced Science course through testing or appropriate coursework.
7. Honors Diploma: Earn one of six Honors Diplomas outlined below:
    1. Academic Honors Diploma;
    2. International Baccalaureate Honors Diploma;
    3. Career-Tech Honors Diploma;
    4. STEM Honors Diploma;
    5. Arts Honors Diploma;
    6. Social Science and Civic Engagement Honors Diploma.
8. Seal of Biliteracy: Meet the requirements and criteria, including proficiency requirements on assessments in a world language and English.
9. Technology : A student can:
    1. Earn a score that is at least equivalent to proficient on an appropriate Advanced Placement or International Baccalaureate exam;
    2. Earn a final course grade that is equivalent to a "B" or higher in an appropriate class taken through the College Credit Plus program; or
    3. Complete a course offered through the district or school that meets guidelines developed by the Department. (A district or school is not required to offer a course that meets those guidelines.)
10. Community Service (Local only): A student must complete a community service project through a group or organization which promotes community service. Some examples would be an Eagle Scout project, a community service project where the student was the organizer and is the lead person through a school or community group (Key Club, Church affiliation, Student Council). This project must be presented to the Firelands High School Building Leadership Team (BLT) prior to being approved, and must be verified by an adult leader of the community service group. An application is available to submit for pre-approval.
11. Fine and Performing Arts (Local only): A student must complete at least six semesters worth of credit in Band, Choir, Fine Arts, or Drama, and earn a cumulative 3.0 GPA during those six semesters in order to earn this seal. Students may also apply through an outside group to achieve this seal, but it must be pre-approved by the Firelands

High School BLT prior to being approved. Examples of this would be participation in the Cleveland Orchestra, an outside Drama Club, or some other group where participation could be verified. This person must have over 120 cumulative hours in the activity or club verified to meet the qualification. An application is available to submit for pre-approval.

12. Student Engagement (Local only): A student must participate in extracurricular activities such as athletics, band or choir, a club (Art Society, Tri-M, Student Council, Class Council, etc) or intracurricular activities, such as FFA, to a meaningful extent. The student must successfully complete at least six semesters of activities to be deemed meaningfully engaged. All activities are verified by the advisor or coach of the group. There is no need to apply for this seal.

ACADEMIC PATHWAYS

COLLEGE PREP

Students are encouraged to take as many academic classes as possible to prepare for college after high school. College & Career Readiness focuses on the transition after high school to post-secondary training based on individual career goals. It is important to note that a student must be doing well in their courses to keep taking upper level courses. It is highly recommended that students interested in pursuing further education obtain three credits of a world language.

COLLEGE TECH PREP

College Tech Prep (CTP) programs are a unique educational option for the last two years of high school. It is designed for students who plan to go to college - but who want to actually *experience* a particular career before investing in college. The program combines traditional, college-preparatory academics with intense, lab-based instruction in the career of choice. Because of the need for specialized lab facilities, ½ of the day is normally spent at the home school for academics. The other ½ day is spent at the Lorain County JVS.

Learning in CTP programs is hands-on and challenging, with the opportunity to earn articulated college credit for work completed at the high school level. Students best suited for College Tech Prep are those who are active, experiential learners, who like building, designing, and "tinkering," and who learn best by applying their knowledge to real-life situations.

Enrollment in College Tech Prep programs is competitive and generally requires:

- A solid GPA (approximately 2.5 or above)
- Completion of at least Algebra I with a grade of "C" or better
- Junior standing at the end of 10th grade
- Completion of Biology with a "B" or better (Health Science Technology only)

Program Options

Allied Health Science: Train in patient care techniques and learn anatomy, physiology, medical terminology, and lab procedures. Observe clinical professionals in a variety of health care facilities to explore potential careers.

Sports, Health and Fitness Technology: Pursue a career in the fitness, sports medicine, and therapy industries. Learn anatomy, exercise physiology, strength conditioning, nutrition, medical terminology, sports medicine, and therapy techniques.

Project Lead the Way-Engineering (PLTW): Designed to help you succeed in engineering, science, and technology careers. This program takes place on the campus of LCCC.

Digital Media Arts: Study film and video while working in a studio environment and gain hands-on experience with DSLR cameras as well as digital audio and lighting equipment.

Cybersecurity and Networking: Learn about cyber threats and how to secure networks and devices from harmful intrusions. Build, upgrade, and repair computers and maintain laptops and mobile devices.

PROJECT LEAD THE WAY (PLTW)

PLTW is a high school college tech-prep program designed to help students succeed in engineering, science, and technology careers. The PLTW program begins at a student's home school with a course taken in the sophomore year. Students who choose to continue the PLTW program take their junior courses at Lorain County JVS or at a satellite location on the campus of Lorain County Community College. Academic courses are taken at a student's home school.

INTRODUCTION TO ENGINEERING DESIGN – 9th - 10th Grade – at FHS – 36 week course

This course will introduce students to the design process and the tools used in product development. Students will learn through first-hand experience the activities that engineers engage in through the design cycle. Development of design briefs, sketching, 3-D solid modeling and prototyping will provide the foundation for activities in Introduction to Engineering Design.

PRINCIPLES OF ENGINEERING (POE) - 10th – 12th Grade - 1st Semester at JVS

Explore technology and engineering processes to discover how math, science, and engineering impact your daily life.

COMPUTER INTEGRATED MANUFACTURING (CIM) - 11th Grade - 2nd Semester

Create 3-D designs with modeling software and learn about robotics and automated manufacturing.

DIGITAL ELECTRONICS (DE) - 12th Grade - 1st Semester

Design, test, and construct circuits. Use computer simulation to learn about electronics.

CIVIL ENGINEERING & ARCHITECTURE - (CIVIL) - 12th Grade - 2nd Semester

Work in teams to design community building projects.

CAPSTONE PROJECT (Capstone) - 12th Grade

Demonstrate what you've learned by collaborating with your classmates and community mentors to research, design, and construct solutions to engineering problems.

Program Highlights

- If you do well in the PLTW courses and pass the exit exam, your courses can earn you college credit.
- Some of the college credits you earn by taking PLTW courses can be transferred to over 30 colleges and universities, and this list gets bigger every day.
- You can conveniently take additional courses and earn your Associate Degree while still in high school.

VOCATIONAL PROGRAMS
LORAIN COUNTY JOINT VOCATIONAL SCHOOL

The Lorain County Joint Vocational School (LCJVS) provides our Juniors and Seniors the opportunity to receive specific vocational training. Receive a vocational certificate and diploma if you successfully complete the program. This is good training for entry into career fields. You can also attend college upon graduation.

During the sophomore year, presentations are given at FHS to provide a general overview of all programs offered at LCJVS. Interested sophomores may then choose two programs to visit for a sophomore tour of programs at the LCJVS.
The application process begins in February of the sophomore year. We recommend that students apply to LCJVS if they have any interest. They may then decide in the fall whether to stay at LCJVS or return to FHS.

Students apply for admission to programs and are chosen according to their qualifications in comparison with those of other applicants. Factors considered for admission are grade point average, attendance record, and courses taken at FHS. Students who apply late will not have a good opportunity for admittance.

Students attending LCJVS during their junior and senior years must meet Firelands High School graduation requirements and are still eligible for college or further technical training.

TEACHER EDUCATION EXPLORATION PROGRAM (TEE)

The Teacher Education Exploration Program is designed to encourage interested high school seniors to enter the teaching profession by providing them with the support and training necessary for success as both students and teachers. The students enrolled in the TEE Program will intern in all grade levels, from kindergarten through high school.

Students enrolled in the Teacher Education Exploration Program will receive three vocational credits and three college credits if they maintain at least a B average. The Program consists of classroom time (one day per week) and internship experience (four days per week) for three periods per day.

Teacher Education Exploration curriculum will be taught as an online course offered through Lorain County JVS's website. The students will also meet with the TEE Program teacher one day per week at LCCC to gather information, concepts, and theories related to teaching, learning, and children. The best way to learn how to teach is to observe experienced and enthusiastic teachers and to talk to them about what they do. Students will learn to apply information, concepts, and theories to real-life contexts. TEE students will be placed in K-12 classrooms as interns with each placement lasting four to six weeks. At the end of the year, the student will be able to revisit his/her favorite grade level or area.
For students, the Program has the following goals:

- Ensure college readiness and exposure to college
- Provide education related to teaching and learning
- Provide internship experience under the guidance of an experienced teacher
- Promote positive attitudes towards teaching

Sample Schedule: Required: English IV & Math Electives: TEE (3credits) & 1-2 Elective Classes

COLLEGE CREDIT OPPORTUNITIES AT FHS

Students enrolled in the following courses have the opportunity to receive college credit:
AP Art & Design– Successful completion and passage of the prescribed AP Art Portfolio
AP Calculus – Successful passage of the AP Exam as individually determined by each college/university
AP Physics – Successful passage of the AP Exam as individually determined by each college/university
LCCC – College Algebra – 4 college credit hours from LCCC
LCCC – Trigonometry – 3 college credit hours from LCCC
LCCC – Statistics – 3 college credit hours from LCCC
LCCC – General, Organic, and Biochemistry I & II – 4 college credit hours each from LCCC
LCCC – General Chemistry I & II -5 college credit hours each from LCCC
LCCC – Chemistry and Society – 3 college credit hours from LCCC
LCCC – College Composition I & II – 3 college credit hours each from LCCC
LCCC – Intro to Fiction – 3 college credit hours from LCCC
LCCC – Intro to Mythology – 3 college credit hours from LCCC
LCCC – Elementary French I & II – 3 college credit hours each from LCCC
LCCC – Intermediate French I & II – 3 college credit hours each from LCCC
LCCC – American National Government – 3 college credit hours from LCCC
LCCC – US History I & II – 3 college credit hours each from LCCC
LCCC – Introduction to Sociology – 3 college credit hours from LCCC
LCCC – Introduction to Psychology – 3 college credit hours from LCCC
LCCC – Personal Finance – 3 college credit hours from LCCC
LCCC - United States I & II – 3 college credits hours each from LCCC
LCCC - Introduction to Business Administration - 3 college credit hours from LCCC
LCCC - Plant Propagation - 2 college credit hours from LCCC
LCCC - Business Principles of Sustainable Agriculture - 3 college credit hours from LCCC

CCP or AP Weighting – 5.0 Scale – Any AP or CCP Course taken at FHS is weighted on this scale. For CCP Courses taken at a partner institution, listed below are the departments in which a course taken would be weighted on this scale, due to the fact that a class in a related subject area is weighted at FHS. All CCP Courses taken at a partner higher education institution must also be approved under OAC (Ohio Administrative Code) 3333-1-65-.12, and must also be courses approved under Tier I or Tier II guidelines.

- **English** - Courses taken in the following areas are eligible for this scale – Applied Communication (TCMN), Journalism (JRNM), Literature and Composition (ENG), Speech (CMMC)
- **Mathematics and Science** – Courses taken in the following areas are eligible for this scale – Astronomy (ASTY), Biology (BIOG), Computer Gaming and Simulation Design (CGSD), Chemistry (CHMY), Mathematics (MTHM), Physics (PHYC), Physical Science (PSSC), Sustainable Agriculture (SAGR)
- **Social Studies** – Courses taken in the following areas are eligible for this scale - History (HSTR), Humanities (HUMS), Philosophy (PHLY), Political Science and Government (PLSC), Psychology (PSYH), Social Science (SOCY), Western Civilization
- **Financial Literacy** – Courses taken in the following areas are eligible for this scale - Finance (FNCE) and Economics (ECNM)
- **Electives** – Courses taken in the following areas are eligible for this scale - Art (ARTS) and French (FRNH)

Grading Scale – A – 5.0, B – 4.0, C – 3.0, D – 1.0, F – 0.0

COLLEGE CREDIT PLUS PATHWAY

A student enrolled at Firelands High School is eligible to participate in the College Credit Plus Program. This is an opportunity for students to take classes through the Lorain County Community College. The purpose of this program is to provide a wider variety of options to high school students. Students interested in this program must meet Firelands High School graduation requirements plus any enrollment requirements that post-secondary institutions may have.

FIRELANDS CCP ENHANCED PATHWAY

9th Grade

Periods Avail.	HS Credit	HS Course	LCCC Course	College Credit
1	1	Honors English I		
2	1	Honors Geometry		
3	1	Honors Biology		
4	1	Honors Modern World History		
5	1	Foreign Language I		
6	.25/.5	PE/Elective		
7	1	Elective		
Totals	**6.75**			**0**

10th Grade

Periods Avail.	HS Credit	HS Course	LCCC Course	College Credit
1	1	Honors English II		
2	1	Honors Algebra II		
3	1	Honors Chemistry		
4	1 1	American History	HSTR 161: United States I HSTR 162: United States II	3 3
5	.5 .25	Health Physical Education		
6	1	Foreign Language II		
7	1	Elective/Fine Arts		
	7.75			**6**
Totals	**14.50**			**6**

11th Grade

Periods Avail.	HS Credit	HS Course	LCCC Course	College Credit
1	1	English		
2	1 1 1	Advanced Math Or Pre-Calculus	MTHM 168: Statistics MTHM 171: College Algebra MTHM 174: Trigonometry	3 4 4
3	2 2	Advanced Science	CHMY 161/2: Gen, Org, and Biochemistry I & II OR CHMY 171/2: Gen Chemistry I & II OR	8 10
4	1	Social Studies 3	PLSC 156: American National Government	3
4	1	Elective	ECNM 113: Personal Finance	3
5	1 or 2	Spanish III/CCP French		6
6 & 7	2	Open/Elective		
				30-32
Totals	**23.50-25.50**			**36-38**

12th Grade

Periods Avail.	HS Credit	HS Course	LCCC Course	College Credit
1	1	English 12	ENGL 161: College Composition I	3
	1		ENGL 162: College Composition II	3
	1		ENGL 255: Introduction to Fiction	3
	1		HUMS 271: Introduction to Mythology	3
2	1	Advanced Math	MTHM 168: Statistics	3
	1		MTHM 171: College Algebra	4
	1		MTHM 174: Trigonometry	4
	1		AP Calculus	
3	2	Advanced Science	CHMY 161/2: Gen, Org, and Biochemistry I & II OR	8
	2		CHMY 171/2: Gen Chemistry I & II	10
	1		CHMY 155: Chemistry and Society	3
4	1 or 2	Spanish IV/CCP French		6
5, 6, 7	**5-8**	Open Elective		
Totals	**28.50- 33.50**			

CCP Advantages

A. Courses paid for by the school district. High school and college credit is awarded for successful completion of courses
B. A supplement to college prep curriculum
C. Gives students opportunity to see what is expected in college
D. Courses available at FHS. If taken at LCCC, student must provide their own transportation

COLLEGE CREDIT PLUS (CCP) PROBATION OR DISMISSAL POLICY (OAC 3333-1-65.13)

Underperforming and Ineligible Students

I. Has a cumulative grade point average of lower than 2.0 in the college courses taken through the college credit plus program.

II. Withdraws from, or receives no credit, for two or more courses in the same term

"Ineligible student" means a student who meets the definition of an underperforming student for two consecutive terms of enrollment.

CCP PROBATION

I. The student shall enroll in no more than one college course in any term
II. The student shall not enroll in a college course in the same subject as a college course in which the student earned a grade of "D" or "F" or for which the student received no credit
III. If a student takes a college course after being placed on CCP probation and the course grade raises the student's cumulative grade point average in the student's college courses (College GPA) to a 2.0 or higher, the student shall be removed from CCP probation and may participate in the college credit plus program without restrictions, unless the student again becomes subject to this rule. If the student takes a college course while on CCP probation and the course grade does not raise the student's cumulative grade point average in the student's college courses (College GPA) to a 2.0 or higher, the student shall be dismissed from the program in accordance with CCP Dismissal Policy below

CCP DISMISSAL

I. A student who has been dismissed from the college credit plus program shall not take any college courses through the program. In the event the student fails to dis-enroll from courses as required by this paragraph, the secondary school shall promptly notify the student and the student's parent that the student shall be responsible for paying all tuition, fees, and textbook costs for courses from which the student was required to dis-enroll and that the student's dismissal from the program shall continue for an additional term.
II. After one term of CCP dismissal, a student may request the secondary school to allow the student to participate in the college credit plus program. The school shall review the student's full high school and college academic record to determine the student's academic progress. The school shall continue the student's dismissal, place the student on CCP probation, or allow the student to participate in the program. For purposes of this paragraph, summer shall count as a term of dismissal from the program only if the student is enrolled in one or more high school courses during the summer.

CCP APPEAL PROCESS AND CRITERIA FOR RE-ADMISSION

I. A student who is dismissed from the college credit plus program, or is prohibited from taking a course due to probation, may appeal the decision to the High School Principal, acting as the designee for the Superintendent in this matter. The High School Principal may take into account any extenuating circumstances separate from academic performance that may have affected the student's CCP status and may do any of the following:

(a) Allow the student to participate in the program without restrictions
(b) Allow the student to take a course otherwise prohibited by probation
(c) Allow the student to participate in the program on CCP probation
(d) Maintain the student's dismissal from the program.

II. The student shall request an appeal within five business days after being notified of the CCP dismissal or the CCP probation that prohibits the student from taking a course in a subject under probation. The secondary school shall promptly notify any institution of higher education in which the student is enrolled that the student has requested an appeal. The Superintendent's designee, as applicable, shall issue a decision on the student's appeal within ten business days after the date the appeal is made. The decision shall be final. The secondary school shall promptly notify any institution of higher education in which the student is enrolled of the decision.

CRITERIA FOR REINSTATEMENT INTO THE CCP PROGRAM

Following one term of dismissal, a student may submit a request to the Superintendent (designee) to be reinstated to the College Credit Plus Program. Summer shall only be counted as a term if the student is enrolled in one or more high school courses during the summer. Upon receipt of the reinstatement request, the student's full high school and college academic record will be reviewed to determine whether the student has achieved academic progress and whether s/he will be reinstated on probation or without restriction.

Reinstatement on Probation: In order to be reinstated to the College Credit Plus Program on probation, the student must meet the following academic progress criteria:

I. Student completes high school courses with an established grade point average of a 3.0 (unweighted) in subject/content area, and
II. In coordination with his/her assigned FHS counselor, establish an individual success plan to review progress toward meeting high school graduation requirements and college course options, and
III. Maintain a daily attendance rate at Firelands High School of 85% or higher.

Reinstatement without Restriction: In order to be reinstated without any restrictions, the student must meet the following academic progress criteria:

I. Completion of CCP course(s) with an established grade point average of a 3.0 unweighted or higher in each core subject/content area, and
II. In coordination with his/her assigned FHS counselor, establish an individual success plan to review progress toward meeting high school graduation requirements and college course options.

If the student fails to demonstrate academic progress as defined above, the Superintendent (designee) shall extend/continue the student's dismissal for an additional term(s).
During the dismissal period, the student shall remain ineligible to participate in the College Credit Plus Program until academic progress is achieved.

RECOGNITION FOR ACADEMIC EXCELLENCE

Firelands High School will recognize academic excellence as follows:

Summa Cum Laude
Any student having earned an accumulative GPA of 4.0 or higher by the conclusion of the 7th semester will be distinguished as a *Summa Cum Laude* graduate (with highest honors). This distinction will replace the former recognitions of valedictorian and salutatorian.

Magna Cum Laude
Any student having earned an accumulative GPA of 3.75 to 3.999 by the conclusion of the 7th semester will be distinguished as a *Magna Cum Laude* graduate (with high honors).

Cum Laude
Any student having earned an accumulative GPA of 3.5 to 3.749 by the conclusion of the 7th semester will be distinguished as a *Cum Laude* graduate (with honors).

Honors Diplomas

High school students can gain state recognition for exceeding Ohio's graduation requirements through an honors diploma. Students challenge themselves by taking and succeeding at high-level coursework and in real-world experiences.

Ohio students have the opportunity to choose to pursue one of six honors diplomas:

- Academic Honors Diploma
- International Baccalaureate Honors Diploma
- Career Tech Honors Diploma
- STEM Honors Diploma
- Arts Honors Diploma*
- Social Science and Civic Engagement Honors Diploma

*includes dance, drama/theatre, music and visual art.

Please go to http://education.ohio.gov/Topics/Ohio-s-Graduation-Requirements/Honors-Diplomas for more information about Honors Diplomas.

HONORS CLASSES

Honors classes are characterized by the following:

- Independent work – An increased level of rigor and depth for self-exploration
- Complexity and difficulty of material – the material is more difficult and complex than general education courses
- Critical thinking skills -- honors classes require a greater amount of activity at higher levels of critical thinking, including synthesis and evaluation

The following courses will be offered as Honors courses:

Honors Algebra
Honors Algebra II
Honors Geometry
Honors English I & II
Honors Modern World History
Honors Biology
Honors Chemistry
Honors Anatomy & Physiology
Honors Art III, IV, Advanced Art

Honors classes are on the following grading scale: A = 4.5 points, B = 3.5 points, C = 2.5 points, and D = 1 point.

MINIMUM CLASS SIZE

Elective and honor classes must have a minimum of ten (10) students. If a class a student registers for does not meet this requirement and is eliminated, the student will be notified.

COURSE LOAD

Students in grades 9, 10 and 11 must take a minimum of the equivalent of 6.0 credits per year (5.75 if taking a Physical Education course). Students who have 12th grade standing must take a minimum of 5.0 credits per year. Credits earned are a combination of courses taken at FHS, the LCJVS, or a CCP program. All students in grades 9-12 are required to enroll in four credits of core courses per year at Firelands High School. Core is defined as English, Math, Science, and Social Studies. This rule may be modified due to the special circumstances of a student's academic program and previous credits earned.

Students and parents are given full input into choosing classes. This process should be undertaken with care since no schedule changes will not be permitted after the start of each semester unless a placement team, which includes parents, teacher, counselor, and principal, agree that a misplacement has been made. For this reason, students may change their schedules only prior to June 1 of the previous academic year.

Schedule changes will only be made for academic reasons. These reasons do not include reasons outside of the educational process. Please also remember that athletes must pass, at the minimum, the equivalent of five (5) 1-credit courses each grading period to remain eligible for the following grading period. It is the responsibility of every student, regardless of where the courses are taken, to ensure their eligibility status each time they schedule, or alter their schedule. Please also note that Physical Education Courses which are worth .25 credits do not meet the criteria of the equivalent of a 1-credit class, and are not counted as one of the five one-credit courses required for athletic eligibility.

If additional classes are desired and openings are available, courses may be added prior to the beginning of a semester with a parent note and counselor approval.

CREDITS OUTSIDE THE REGULAR SCHOOL PROGRAM

Credits will not be granted for night school, summer school, or private tutoring without prior approval of the principal and school counselor. This approval must be granted **BEFORE** a student registers for any of the above listed activities.

FLEXIBLE CREDIT

Flexible Credit is any alternative coursework, assessment, or performance that demonstrates proficiency needed to be awarded equivalent graduation credit as approved by the school district. Approved credit awarded through this policy will be posted on the student's transcript and counted as graduation credit in the related subject area or as an elective. Flexible Credit is designed to be an alternative to the standardized unit of credit, Carnegie Unit, or 120 hours of seat time.
Any high school student may apply for credit to be awarded through Credit Flexibility by submitting the appropriate forms and receiving approval. The student will be required to provide supporting documentation as determined by the administration. They may also be required to take a test, create a project, or complete several combinations of measures to prove they have succeeded in completing the Flex Credit. The teacher who provides the credit must provide a plan as to how the student will prove competence in the desired Flex Credit area. Applications may be made twice a year; deadlines are June 1st and December 1st.

REPEATING FAILED SUBJECTS

A student who fails a required subject must repeat it the following year or take it in summer school. **If a student fails English or Math, the student must make it up in summer school to stay on track for graduation.** A student who fails other required graduation courses or electives has a choice of retaking the course during the following school year or during summer school. The student must communicate the plan to retake the course to the guidance office before the end of the school year to allow for proper scheduling. It is the responsibility of the student to see the counselor to make arrangements concerning failed subjects. It is recommended that all failed courses be taken during the summer.

ACT/SAT

These tests are part of admission requirements for most colleges and universities across the country. Many schools accept either but you should check with the college admissions office on which test they prefer. These tests may be taken any number of times with only the best scores counting for college admissions and scholarships. Students may take these tests at any time, but it is recommended for students to take one of these tests in the spring of their junior year and/or early in their senior year. Students on free or reduced lunches may be eligible for a reduction in testing fees. Test dates can be found on the test website, listed below for both. **Please note that the State of Ohio will pay for a selected college entrance test to be given at the home school for all student in the spring of their junior year. Students will be registered through the School Counseling Office.**

ACT www.actstudent.org SAT www.collegeboard.org

FHS Course Listing By Department

CAREER BASED INTERVENTION (CBI)

Course No.	Course Name	Credit
365	Career Readiness	1
366	Career Exploration	1
390	Career Connections	1
391	CBI Related Skills	1 to 3 credits

Career Readiness (365) **Grade 9** **1 credit**

This is a freshman level course that offers students a chance to explore their skills, aptitudes, passions, and interests to help students self-discover possible careers. The class also has a heavy emphasis on personal finance including budgeting that is designed to give the students a reality-based look at what they want in life and what they need to do to be able to afford that lifestyle. A second component of the class is a cloud based lab experience designed to give students problem solving tasks embedded in career modules. Finally, a third experience includes a hands-on component that allows students to design, build, test, and compete with other students in such areas as bridges, cranes, houses, and CO_2 cars.

Career Exploration (366) **Grade 10** **1 credit**

This is a sophomore level course that offers students the opportunity to delve further into their career interests. Guest speakers, field trips, JVS tours and shadowing are all utilized to help the students discover more about the daily requirements of their chosen careers. A cloud based lab experience that is designed to give students problem solving tasks embedded in career modules will be utilized. Students will also learn soft skills that will help them be better suited to apply for and get a job.

Career Connections (390) **Grades 11 & 12** **1 credit**

A career exploration course that will assist students in choosing a post-secondary pathway and to develop the necessary skills for success in college. Topics include self-discovery through values clarification, skill identification, interest, and personality assessments; career and major research; strategies for success in college; and establishing a plan for educational goal achievement. This course may be used to fulfill the College 101 requirement at LCCC. Student will receive Pre-Apprenticeship training through a collaboration with apprenticeship sponsors that will provide exposure to the work environment and allow the opportunity to gain industry credentials. Students will examine the technological, economic, sociological, cultural, and psychological trends that influence life planning, selection of college major, and career choice. Topics will include values clarification, goal setting, needs assessment, skill identification, and a synthesis of information to create a life/career plan.

Career Pathways (391) **Grade 12** **1 to 3 credits**

The Career Based Intervention program is designed for senior students who are academically on track for graduation and are looking for real-world work experience during the lab portion of their school day. The program attempts to reorient students' attitudes toward higher levels of achievement in school and work to reinforce their social responsibility to our society. It is hoped this can be accomplished by arranging suitable, on-the-job training and related instruction to develop feelings of accomplishment and success. Career Based Intervention students must work during the lab portion of their school day in the local business community and they receive high school credit for this work experience. Students enrolled in Career Pathways may not dual enroll in any other Career Intervention Course. This program is for students who:

- Have a valid driver's license
- Are physically able to work
- Have been recommended by school personnel
- Students are required to maintain employment for the entire school year.
- Transportation to and from school and the job site is the responsibility of the student.

AGRICULTURAL SCIENCE

Course No.	Course Name	Credit
970	Energy Systems Management	1.25
971	Animal Health	1.25
972	Environmental Science for Agriculture and Natural Resources	1.25
975	Agriculture, Food and Natural Resources	1.25
981	Animal & Plant Science	1.25
985	Business Management for Agricultural & Environmental Systems	1.25
993	Mechanical Principles	1.25
995	Ag. & Environmental System Capstone	1.25

***All agricultural science classes will have a Class and Future Farmers of America (FFA) fee due at the beginning of the school year.**

Agriculture, Food and Natural Resources (975) **1.25 credit**
This is the first course in the Agricultural and Environmental Systems career field. It introduces students to the pathways that are offered in the Agricultural and Environmental Systems career field. As such, learners will obtain fundamental knowledge and skills in food science, natural resource management, animal science & management, plant & horticultural science, power technology and biotechnology. Students will be introduced to the FFA organization and begin development of their leadership ability. Approximately eight weeks of course will be devoted to agricultural mechanics lab projects, specifically hand & power tool woodworking. Each student is required to complete a Supervised Agricultural Experience (SAE) program involving animals, crops, or job placement that is worth 0.25 credits and will take place outside of regular school hours. The course and lab work are worth one credit for a combined 1.25 credit hours. Preference is given to freshman who could complete a four year sequence. Enrollment is limited to 35 students per year. ***Fee***

Animal and Plant Science (981) (optional LCCC credit for SAGR 113 Plant Propagation-Spring semester) **1.25 credit**
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. Each student is required to complete a Supervised Agricultural Experience (SAE) program involving animals, crops, or job placement that is worth 0.25 credits and will take place outside of regular school hours. The course and lab work are worth one credit for a combined 1.25 credit hours. Students choosing to take the SAGR 113 in the spring semester (run concurrently) must be enrolled in the full year Animal and Plant Science course. **Prerequisite: Agriculture, Food and Natural Resources Prerequisite for SAGR 113 is proficient level on Accuplacer test** ***Fee***

Business Management for Agricultural & Environmental Systems (985) (optional LCCC Course SAGR 112 Business Principles of Sustainable Agriculture - fall semester) (articulated credit with University of Northwestern Ohio) **1.25 credit**
Learners will examine elements of business, identify organizational structures and identify and apply management skills. Learners will develop 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. Learners will practice customer sales techniques and apply concepts of ethics and professionalism while understanding related business regulations. The National FFA Organization is further emphasized. Approximately eight weeks of course will be devoted to agricultural mechanics lab projects, specifically plumbing & independent project construction. Each student is required to complete a Supervised Agricultural Experience (SAE) program involving animals, crops, or job placement that is worth 0.25 credits and will take place outside of regular school hours. The course and lab work are worth one credit for a combined 1.25 credit hours Students choosing to take the SAGR 112 in the fall semester (run concurrently) must be enrolled in the full year Business Management course.. **Prerequisite: Agriculture, Food and Natural Resources. Prerequisite for SAGR 112 course is proficient level on Accuplacer test.** ***Fee***

Mechanical Principles (993) **1.25 credit**
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 identifying, diagnosing, and maintaining small air-cooled engines. Throughout the course, students will learn critical components of site and personal safety as well as communication and leadership skills. Each student is required to complete a Supervised Agricultural Experience (SAE) program involving animals, crops, or job placement that is worth 0.25 credits and will take place outside of regular school hours. The course and lab work are worth one credit for a combined 1.25 credit hours. **Prerequisite: Agriculture, Food and Natural Resources & Junior or Senior**

Agricultural and Environmental Systems Capstone (995) **1.25 credit**
Students apply Agricultural and Environmental Systems program knowledge and skills in a more comprehensive and authentic way. Capstones are project/problem-based learning opportunities that occur both in and away from school. Students will participate in weekly current events blogs and monthly discussion during a Wednesday Falcon period. **Prerequisite: Must be a senior and enrolled in an Agricultural Course** ***Fee***

Energy Systems Management (970) **Grades 11 & 12 1.25 credit**
Students will apply basic principles of energy accounting, thermodynamics and heat transfer, energy conversion and efficiency to heating, power generation and transportation. Students will apply the principles and practices needed for managing renewable and non-renewable energy resources. Throughout this course, future energy systems and energy use scenarios are investigated, with a focus on promoting the use of renewable energy resources and technologies.

Environmental Science for Agriculture and Natural Resources (972) **Grades 11 & 12 1.25 credit**
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.

Animal Health (971) **Grades 11 & 12 1.25 credit**
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. **Prerequisite: Agriculture, Food and Natural Resources and Animal and Plant Science**

BUSINESS & TECHNOLOGY

Course No.	Course Name	Credit
419	Financial Literacy	0.5
443	LCCC Personal Finance	1
276	Intro to Engineering	1
700	Innovation and Entrepreneurship	0.5
001	STEM	0.5
703	Advanced Automation & Robotics	1
705	Intro to Broadcasting	1
BRDCST I	Broadcasting I	1
709	LCCC Intro to Business Administration	1
	Industry 4.0 Fundamentals	1

FINANCIAL LITERACY (419) **Grade 11 0.5 credit**
Financial Literacy also examines the ability of individuals to use knowledge and skills to manage limited financial resources effectively for a lifetime of financial security. Topics include financial responsibility, money management, saving, investing, credit, debt, and insurance.

LCCC – PERSONAL FINANCE (443) ECNM 113 **1 credit**
An analysis of the consumer's role in our economic system. Topics covered include: money management, budgeting, saving and borrowing, use of credit, financing long-term purchases, insurance and investments, taxes and retirement and estate planning.

INTRO TO ENGINEERING (276) **Grades 9-10 1 credit**
This course will introduce students to the design process and the tools used in product development. Students will learn through first-hand experience the activities that engineers engage in through the design cycle. Development of design briefs, sketching, 3-D solid modeling and prototyping will provide the foundation for activities in Introduction to Engineering Design.

INNOVATION & ENTREPRENEURSHIP (700) **Semester Class 0.5 credit**
Jump into the Shark Tank. Learn the Design Process as it relates to 3D printing, prototype production, and real-world problem solving. Students play the role of a Shark Tank entrepreneur by creating a product idea, developing a website to promote their product and creating a 3D prototype of their product. Students will be introduced to simple design software to help them develop, share, improve, and print classroom projects. Programming and web design will be integrated into the process. Students will understand programming language and the importance of web standards, work with graphics, and be able to critically evaluate website quality.

STEM (STEM001) **Semester Class 0.5 credit**
Students will engage in a variety of STEM related activities including topics such as robotics, coding, and 3D Modeling. The engineering design process will be used to invent or innovate new technologies. Hands-on prototyping and model building will be used to deliver new design ideas. Engineering careers in fields related to student projects will be explored helping connect their work to potential job opportunities.
****If FHS receives the grant for Industry 4.0 Fundamentals, STEM will be discontinued. Otherwise, STEM will continue as is.**

ADVANCED AUTOMATION & ROBOTICS (703) **1 credit**
This course will introduce students to advanced robotic mechanism builds and autonomous block and text programming. Students will design and build robots to participate in classroom competitions. Careers in robotics engineering will be explored and applied to current uses in society.

INDUSTRY 4.0 FUNDAMENTALS I (###) **1 credit**
Industry 4.0 Fundamentals (I4F) teaches basic manufacturing skills and builds industrial competencies in areas like PLC troubleshooting, mechatronics, and data analytics, as well as how to program and operate a FANUC robot. I4F was developed by subject matter experts with real-world feedback from industry and educational institutions. This program for secondary of post-secondary education is divided into four major course areas. This course includes two credentialing pathways. All students will take Course 1: Introduction to Mechatronics. Then students will complete one additional credentialing path and will have the choice between: Course 2(Introduction

to Industrial Control Systems), Course 3 (Robot Operation & Programming/Certified Production Technician), and Course 4 (Introduction to Industrial Internet of Things).
**Industry 4.0 Fundamentals course are contingent upon approval of a grant. Additional Industry 4.0 Fundamentals courses will be offered in future years, contingent upon receiving the grant.

LCCC-INTRO TO BUSINESS ADMINISTRATION BADM 155 (709) **1 credit**
This course provides an introduction to the basic fundamentals of business including: entrepreneurship, marketing, international business, economics, and investments. Students will learn critical thinking and analytic skills that will prepare them for their future careers. Students will be introduced to the dynamic world of business and will take on the role of a business professional faced with real-world, workplace challenges. Video case studies will also be used to analyze key concepts that are used in today's business environment.

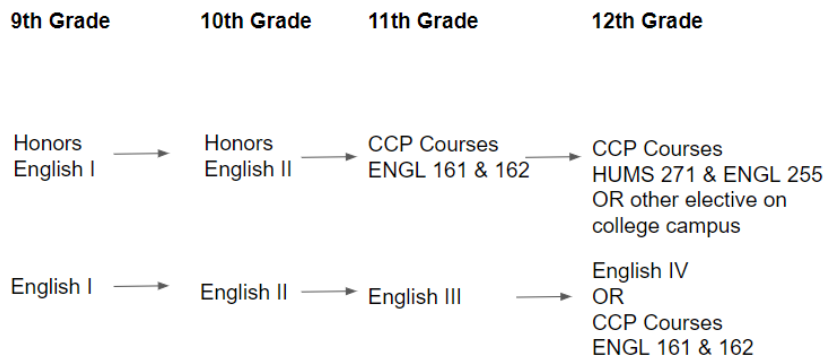
INTRO TO BROADCASTING (705) **1 credit**
Introduction to Broadcasting familiarizes students with the basic principles of broadcast production and new media. This course is for students who have a general interest in broadcast journalism and production. In addition, students must be self-motivated, dependable, and able to work well as a team. Students are responsible for the production of video stories as well as special interest and documentary projects including script writing, video recording, and video editing. Students will gain an understanding of both pre-production, on-air, and post production roles and responsibilities of news broadcasting. By the end of the course, students should have a clear understanding of their own strengths in order to move into the next course where they will specialize in a specific production job.

BROADCASTING I (BRDCST I) **1 credit**
This is a junior and senior level course designed to build upon the skills learned in Intro to Broadcasting. Students in this program will plan and execute hands-on assignments in the areas of camera operation, audio systems, pre-production, studio operations, control room operations, visual effects and graphics, and copyright laws. Students will collaborate with their peers to produce a final product weekly. Any student considering this course should be prepared to do work beyond the classroom. **Perrequisite: Intro to Broadcasting**

ENGLISH

Course No.	Course Name	Credit
101	English I	1
102	English II	1
103	English III	1
104	English IV	1
107	Honors English I	1
108	Honors English II	1
111	LCCC – College Composition I	1
112	LCCC – College Composition II	1
ENGL255	LCCC Introduction to Fiction	1
114	LCCC Introduction to Mythology	1
119	Technology and Society	.5 (Fall)
151	Film as Literature	.5 (Semester)
152	Debate and Speech	.5 (Semester)
001200	Blogging & Podcasting	.5 (Semester)
059999	Creative Writing	.5 (Semester)
001202	Dystopian Fiction	.5 (Semester)
001203	Reading Lab	.5 (Semester)

The chart below shows the expected course progression in Firelands High School English courses..



ENGLISH I (101) **1 credit**
This is a required course that covers both literature and writing. It includes a review of writing skills and emphasis on expository essays. The course includes weekly lessons from a vocabulary text. English I also presents an introduction to the basic types of literature: short story, non-fiction essays, drama, the epic, the novel, and poetry. ***Fee***

ENGLISH II (102) **1 credit**
This is a course consisting of an overall survey of the literature of the great writers of the world. The material covered includes the basic types of fiction: the short story, poetry, and drama, and the novel; and basic types of nonfiction: biography, autobiography, essay, and article. Time will be spent on reading, composition, and limited grammar review. Students will also have some experience with public speaking, especially with presentations of their original works. There are also reading workshops that include journal writing.
Prerequisite: English I ***Fee***

ENGLISH III (103) **1 credit**
English III focuses on the history and development of American literature and includes a study of some of the best novels, plays, poems, and short stories of our American writers. Students will also develop skills in vocabulary, critical thinking and composition. **Prerequisite: English II** ***Fee***

ENGLISH IV (104) **1 credit**
This course includes skills necessary for refining the writing process with general theme writing; research paper writing; critical writing and evaluation; and vocabulary study and is ideal for students heading into the workforce or a career preparation program. Also included are an in-depth study of English literature and authors in historical context, outside reading, and some speech. **Prerequisite: English III** ***Fee***

HONORS ENGLISH I (107) **1 credit**
This is an accelerated survey course that presents the following types of literature: the short story, nonfiction, drama, the novel and poetry. This is a writing intensive course and students who enroll in Honors English are expected to read and write extensively both in and outside of class. Students are also expected to actively participate in class discussions. Since this is an honors course, grading will be based on a four point five (4.5) - grading scale instead of the standard four-point scale. ***Prerequisite: Students are recommended for this course based on their language arts grades during their eighth grade 17 year, a written test given in the winter of their eighth grade year and the recommendation of their eighth grade language arts teacher. If needed, additional test scores and student work will be taken into consideration. Fee***

HONORS ENGLISH II (108) **1 credit**
This is an advanced course that continues an accelerated survey of world literature and introduces students to American literature through a study of the Puritan period and a selection of classic American novels. Vocabulary will also be a part of the curriculum. This is a writing intensive course and students who enroll in Honors English II are expected to read and write extensively. Students are also expected to actively participate in class discussions. Since this is an honors course, grading will be based on a four point five (4.5) - grading scale instead of the standard four-point scale. **Prerequisite**: **B or better in English/Honors English I and the recommendation of their English I teacher.** ***Fee***

LCCC – COLLEGE COMPOSITION I ENGL 161 (111) **1 credit**
An introduction to fundamental college-level skills in academic reading and writing. Summary, analysis, synthesis and research documentation are emphasized, along with critical thinking and collaborative learning. **Prerequisite: Proficient level on Accuplacer Test.**

LCCC – COLLEGE COMPOSITION II ENGL 162 (112) **1 credit**
A writing course continuing the practice of skills introduced in LCCC – College Composition I, as well as strategies of argumentation and secondary research leading to a research paper. **Prerequisite: ENGL 161**

LCCC – INTRODUCTION TO FICTION ENGL 255 (ENGL255) **1 credit**
Study of short stories and novels to acquaint the general student with important themes and critical perspectives applicable to fiction. Humanities Core Course. **Prerequisite: ENGL 161**

LCCC – INTRODUCTION TO MYTHOLOGY HUMS 271 (114) **1 credit**
A survey of major figures, motifs and themes of mythology with attention to theories of myth and to modern literature using myths. Humanities core course. **Prerequisite: Previous or concurrent enrollment in ENGL 161**

ENGLISH ELECTIVES – WILL NOT REPLACE CREDIT IN REQUIRED ENGLISH COURSES

TECHNOLOGY AND SOCIETY (119) **Grades 9-12 Semester Course-Fall – ½ Credit**
This course focuses on technological advancements and how they play a role in the society we live in. Students will discuss the benefits and dangers of the technology we use. The course will focus on social media, online security, privacy, and new technology. Students will debate the ethical and social issues regarding the technology that we use.

FILM AS LITERATURE (151) **Grades 9-12 Semester Course 1/2 Credit**
In this semester-long course, students will view and analyze a variety of films. Students will learn to recognize story-telling elements and make critical observations about social, historical, economic, political, and artistic issues presented in cinema.

DEBATE AND SPEECH (152) **Grades 10-12 Semester Course 1/2 Credit**
In this course, students will learn the skills of argumentation, debate, and critical thinking. This course provides instruction and practice in the art of formal and informal debate and focuses on the in-class debating of major issues surrounding current events. Students will also be immersed in the experience of speaking one-on-one, in partners, and in front of larger groups by the end of their learning process.

BLOGGING AND PODCASTING (001200) **Grades 9-12 Semester Course 1/2 Credit**
Students will demonstrate an understanding of podcasting and blogging as they analyze and produce work using these formats. Those enrolled in this class will work both collaboratively and individually to develop their verbal and written communication skills through the study and creation of blogs and podcasts. Students will learn the basics of digital publishing, including writing, research, interviews, editing, and on-air presentation. Production is a key element of this class so students should be comfortable with public speaking and having their voice recorded.

CREATIVE WRITING (059999) **Grades 10-12 Semester Course 1/2 Credit**
This semester course is for the creative writer who wishes to explore in-depth work in writing and analysis of fiction, poetry, drama, mystery, and script dialogue. Emphasis is placed upon the students ability to communicate their reasons for creative decisions and to execute various writing assignments.

DYSTOPIAN FICTION (001202) **Grades 10-12 Semester Course 1/2 Credit**
Students will read and analyze dystopian novels and short stories in this genre and look at how dystopian fiction critiques the society in which it was written.

READING LAB (001203) **1 credit Grades 9 & 10**
This course helps students to read independently in high school level courses. Students acquire strategies for improving vocabulary and reading comprehension while emphasizing both academic reading and reading for studying. Students will be placed in the class based on teacher recommendations.

FINE ARTS

Course No.	Course Name	Credit
602	Art I	1
604	Art Fundamentals	.5
607	Art Appreciation	.5
610	Art History	.5
615	Art II	1
620	Honors Art III	1
625	Honors Art IV	1
630	Honors Advanced Art	1
635	AP Art & Design	1
UKUL	Ukulele	0.5
650	Marching and Symphonic Band	1
655	Music History	.5
FNDMUS	Foundations of Music	.5
656	Music and Multimedia Technology I	1
658	Music and Multimedia Technology II	1
680	Concert Choir	1
686	Honors Choir	1
690	Freshmen Girls' Choir	1

STUDIO VISUAL ART

Studio Visual Art courses provide the study of the knowledge, skills and processes for observing, creating, responding and communicating through a variety of 2-dimensional and 3-dimensional media in visual art. Art production and the construction of meaning in visual artworks through study and writing are complementary learning activities throughout the program. The Studio Visual Art Courses at FHS

include a semester class for students interested in trying art for one semester and year-long leveled classes Art 1 through Advanced Art for students enrolling in art for three or four years.

STUDIO ART MAJOR COURSE SEQUENCE

ART I (602) **Grade 9 1 credit**
Art I begins the sequence of study for art majors. Art majors are students who schedule for three or four years of art with the opportunity to prepare a portfolio for admission into an art college. The course is designed to provide students with independent problem-solving concepts manipulating the principles of design through various media and techniques. Writing artists' statements and critiques are covered in Art I. Weekly sketching and journaling are required. ***Fee***

ART II (615) **Grades 10-12 1 credit**
This full-year course will help students develop technical proficiency in the production and appreciation of visual art. Students will use two-dimensional, three-dimensional and digital media to develop as artists. Writing artists' statements and critiques continue. There is a focus on in-depth reading and writing in art history. Exploration of career opportunities in art is introduced. Weekly sketching and journaling are required. ***Fee***
Prerequisite: Successful completion of Art I *or* Art Fundamentals

HONORS ART III (620) **Grades 11 – 12 1 credit**
The third year course is for students wishing to continue practicing visual art after high school, as an amateur, professional or connoisseur of visual art. The students will continue work in a broad range of media and explore a specialization. Students are introduced to higher-level media and processes. Students continue to write artists' statements and critiques, and learn to write project proposals. Reading and writing in art continues in depth. Students are required to build a portfolio of their work to explore career options in art. Weekly sketchbook requirement continues. ***Fee***
Prerequisite: Successful completion of Art II and art teacher recommendation.

HONORS ART IV (625) **Grade 12 1 credit**
The fourth year of art is for students wishing to continue practicing visual art after high school, as an amateur, professional or connoisseur of visual art. The students will continue work in a broad range of media, develop a specialization and refine their portfolios. Students continue to write artists' statements, critiques, and project proposals. Reading and writing in art continues in depth. Weekly sketchbook requirement continues. ***Fee***
Prerequisite: Successful completion of Art III and art teacher recommendation.

HONORS ADVANCED ART (630) **Grade 12 1 credit**
This course is for students who have accelerated beyond Art IV. The full-year course is for students wishing to continue practicing visual art after high school, as an amateur, professional or connoisseur of visual art. The students will continue work in a broad range of media, develop a specialization and refine their portfolios. Students continue to write artists' statements, critiques, and project proposals. Reading and writing in art continues in depth. Weekly sketchbook requirement continues. ***Fee***
Prerequisite: Successful completion of Art IV and art teacher recommendation.

AP STUDIO ART (635) **Grade 12 1 credit**
The Advanced Placement (AP) Studio Art Course is a rigorous college-level course for highly motivated senior students who are interested in studying art or design at the post-secondary level to place out of introductory level college art courses. AP Studio Art through the College Board is not based on a written exam; instead, students submit a combination of digital and actual portfolios for evaluation in May. Students will choose a focus and submit portfolios in the areas of 2-Dimensional Design (24 works), 3-Dimensional Design (16-20 works) or Drawing (24 works). Students enrolled in AP Art are expected to submit a portfolio for assessment in May. ***Fee for both materials and AP Assessment Fee***
Prerequisite: Successful completion of Art III or Art IV with an A and art teacher recommendation.

VISUAL ART SPECIALTIES

These courses provide focused study in specific topics of the world of visual art in a non-studio format.

ART FUNDAMENTALS (604) (studio) **Grades 9-12 semester class 0.5 credit**
Art Fundamentals is a studio art course designed for students wishing to explore art-making to fulfill the fine arts credit requirement for graduation. This semester course includes condensed studio experiences in drawing, design, ceramics into 3-dimensional form, printmaking, painting and additional experimental media. Art elements, principles, art history and art criticism are covered. ***Fee***

ART APPRECIATION (607) (non-studio) **Grades 9 – 12 semester class 0.5 credit**
This fast-paced course examines the world of visual art beyond history and creating. This course uses works of American visual art from various historical, cultural and social contexts to delve into the worlds of collecting, conserving and critiquing. The use of technology,

video, reading, speakers and lectures enable students to develop and present their own views and responses to specific topics and to discuss these viewpoints with others through conversation, writing, activities and condensed projects.

ART HISTORY (610) (non-studio) **Grades 9 – 12 semester class 0.5 credit**
This fast-paced course introduces visual art history over a 2.5 million year period. Key western artworks are studied chronologically and thematically with emphasis on subject matter, concepts, and the formal, technical and expressive aspects of the works. The use of technology, video, reading, speakers and lectures enable students to become familiar with the connections between the development of art and events in history through conversation, writing, activities and condensed projects.

PERFORMING ARTS

INSTRUMENTAL MUSIC - MARCHING AND SYMPHONIC BAND (650) **1 credit**
Performing music ensemble. Performances include school concerts, sports events, and special band events. Program focuses on musicianship, tone production, pitch, rhythm, and basic theory. Must be willing to attend all performances and extra rehearsals as necessary. Students must have participated in middle school band, and be able to demonstrate basic musicianship. Students who would like Honors Credit in this area may apply for it through the Music Department, and must meet the listed criteria on the application sheet to receive Honors Credit. **THIS IS A PAY TO PARTICIPATE ACTIVITY WITH A FEE OF $175. (Students who successfully complete two seasons are eligible for the Physical Education Exemption)**

UKULELE (UKUL) **Semester Class (.5 Credit)**
Students will be led through an intensive course to introduce them to the ukulele. The course will be split into several units that cover various aspects of understanding the instrument and the music that can be created with it. Each day, students will be led through a routine of tuning their ukuleles, warming-up, group instruction, and independent group practicing and playing. Students will also learn basic maintenance of the instrument and how to change strings, clean the ukulele's surface, clean strings, and maintain tuning.

MUSIC HISTORY (640) **Semester Class (.5 Credit)**
This is a 1 semester course that will cover music throughout time. We will discuss the influence music has had on significant events, as well as its impact on society and culture.

FOUNDATIONS OF MUSIC (FNDMUS) **Semester Class (.5 credit)**
An intensive introduction to basic music theory and musicianship, covering notation, keys, rhythm, meter, intervals, counterpoint, melody, chords, harmonic progressions, and small forms.

MUSIC and MULTIMEDIA TECHNOLOGY I (656) **1 credit**
In this course you will explore music through the use of technology. Students will learn the evolution of music technology and to mix and re-mix music using basic audio software and create original music using easily accessible technology. Students will learn the basics of Podcasting and Sound production. **(Class Fee of $20 for class materials including headphones and USB drive)**

MUSIC and MULTIMEDIA TECHNOLOGY II (658) **1 credit**
In this course you will explore music through the use of technology. Students will mix and re-mix music using more advanced audio software and create original music, podcasts, and produce audio school news programs using audio technology. Students will learn more advanced Podcasting and Sound production. ***This course will be offered beginning with the 2022-2023 school year. **(Class Fee of $20 for class materials including headphones and USB drive) Prerequisite Music Studio or Music and Multimedia Technology I.**

CONCERT CHOIR (680) **1 credit**
Performing music ensemble. Performances include school concerts, competitions, and special events. Program focuses on music literacy including: vocal production, sight-reading, and basic theory. Must be willing to attend all performances and extra rehearsals as necessary. Must purchase required concert attire.

HONORS CHOIR (686) **1 credit**
Performing music ensemble. Performances include school concerts, competitions, and special events off campus. Program focuses on music literacy including: vocal production, sight-reading, and basic theory. Must be willing to attend all performances and extra rehearsals as necessary. Must purchase required concert attire. **By audition only. Class size limited. Prerequisite: One year of Concert Choir. – This class will be weighted as an Honors Class.**

FRESHMEN TREBLE CHOIR (690) **1 credit**
Performing music ensemble. Performances are generally limited to school concerts. Program focuses on music literacy including: vocal production, sight-reading, and basic theory. Must be willing to attend all performances and extra rehearsals as necessary. Must purchase required concert attire.

WORLD LANGUAGES

WORLD LANGUAGE CLASSES ARE GEARED FOR COLLEGE PREP STUDENTS

Course No.	Course Name	Credit
755	French I	1
760	French II	1
151	LCCC – Elementary French I	1
152	LCCC – Elementary French II	1
251	LCCC – Intermediate French I	1
252	LCCC – Intermediate French II	1
775	Spanish I	1
780	Spanish II	1
785	Spanish III	1
790	Spanish IV	1
777	Artesanías (Handicrafts)	0.5 (1st Semester)
778	Comidas (Foods)	0.5 (2nd Semester)

FRENCH I (755) **1 credit**
This beginning course consists of learning how to read, speak, listen, and write the French language. Emphasis in this course is on learning basic expressions for simple conversation in French**.**

FRENCH II (760) **1 credit**
This course consists of reading, speaking, listening, and writing. More emphasis is placed on these skills along with grammar, past tense and imperfect tense. **Prerequisite: C average or higher in French I.**

LCCC – Elementary French I (151) **1 credit**
An introduction to the language and cultures of the French speaking world. Development of creative communication skills with a balanced emphasis on speaking, listening, reading, and writing. Laboratory practice using various technologies. **Prerequisite: Proficient level on Accuplacer Test**

LCCC – Elementary French II (152) **1 credit**
Continuation of Elementary French I. Further study of the language and cultures of the French speaking world. Continued development of creative communication skills with a balanced emphasis on speaking, listening, reading, and writing. Laboratory practice using various technologies. **Prerequisite: FRNH 152**

LCCC – Intermediate French I (251) **1 credit**
Review of the fundamental structures and introduction of more complex grammatical structures and communication skills with a balanced emphasis on speaking, listening, reading and writing. Exploration of the civilization, culture, and customs of French-speaking people. Laboratory practice using various technologies. **Prerequisite: Teacher recommendation**

LCCC - Intermediate French II FRNH 252 **1 credit**
Continuation of Intermediate French I. Further refinement of the structures and communicative skills with a balanced emphasis on speaking, listening, reading and writing. Continued exploration of the civilization, culture and customs of French-speaking people. Laboratory practice using various technologies. **Prerequisite: FRNH 251**

SPANISH I (775) **1 credit**
Vocabulary, correct pronunciation and knowledge of the fundamental rules of Spanish grammar are emphasized. Basic conversational use of the language is practiced. The geography and customs of Spanish-speaking countries are studied.

SPANISH II (780) **1 credit**
A continuation of Spanish I, this course stresses correct grammatical construction in both oral and written language. The culture of Spanish-speaking countries is studied through reading. **Prerequisite: At least a C average in Spanish I and teacher recommendation**

SPANISH III*** (785) **1 credit**
This course is intended for those students who want to improve written and reading skills in Spanish. Short stories and novels are read; and some more advanced grammar concepts are introduced or reviewed. Creative written projects and a few verbal presentations are required within the course work. Cultural items are discussed where applicable. **Prerequisite: Spanish II/III with at least a C average and teacher recommendation**

SPANISH IV*** (790) **1 credit**
This course is intended for those students who want to improve their practical speaking skills. Travel vocabulary and situations are studied. Some short stories and novels are read; and there are some more advanced grammar concepts introduced or reviewed. Creative verbal conversations, a few written projects and a few verbal presentations are required within the course work. Cultural items are discussed where applicable. **Prerequisite: Spanish II/III with at least a C average and teacher recommendation**

***** NOTE** SPANISH III & SPANISH IV:
The material covered in Spanish III & Spanish IV is alternated yearly to accommodate both levels of language acquisition since the students from both levels are in the same class together. Students taking Spanish III one year will get the concepts described for that level and then will get the concepts described in Spanish IV the next year. Students who have the material from the description of Spanish IV during their 3rd year of World Language learning will get the material from the description of Spanish III their 4th year of taking World Language. On both levels, different grammar concepts, short stories, novels and projects are introduced each year and are intended toward the more practical application and usage of the language—one year in a more written form, the other in a more spoken form. A student choosing either of these two courses should look at **BOTH** descriptions and understand that the material they will be learning will be from one or the other, whichever year is in the rotation.

WORLD LANGUAGE ELECTIVES

THESE COURSES WILL BE FOR GENERAL ELECTIVE CREDIT

ARTESANÍAS (Handicrafts) (777) **1st Semester Only - .5 Credits**
This course is an exploration of the various hand crafted items made/produced in Hispanic cultures. All perspective areas of study will include (but not be limited to): metals/jewelry, clay/pottery, stonework, woodworking, textiles, paper, glass and basket weaving. How each was developed and used within each Hispanic country will be a focus. Students taking this course will assume financial responsibility for any craft items for the projects they individually develop/produce throughout the semester. **Pre-requisite: Spanish 1—full year—C or higher; and/or teacher recommendation**

COMIDAS (foods) (778) **2nd Semester Only – 0.5 Credits**
For this course, students will learn vocabulary related to the Hispanic culinary world through written activities and skits. Also, students will explore the use of food in Spain, Mexico, the Caribbean Islands, Central and South America; as well as its use during major Hispanic festivals. Some costs will be incurred for the construction of a piñata and participation in food tasting experiences throughout the semester. **Pre-requisite: Spanish 1—full year—C or higher; and/or teacher recommendation.**

HEALTH & PHYSICAL EDUCATION

Sports and Physical Education Exemption
All Sports, Marching Band & Cheerleading

A student has the opportunity to earn an exemption for physical education by completing and turning in by May 1 a Physical Education Exemption form. A student must complete the season in good standing to achieve a passing mark which will record on their transcript as a P with 0 credit value. Athletes must complete two separate sports seasons to receive the exemption/credit.

- Cheerleading for football and basketball are viewed as two separate seasons and would count as completion.
- A basketball player who plays two seasons would complete the requirement.
- Marching Band members must complete two fall marching seasons.
- You may not take one PE class for 1/4 credit and exempt 1/4 credit.

Students may still opt to take a physical education course for credit. Physical Education Exemption forms are available in the School Counseling Office.

Course No.	Course Name	Credit
500	Health	.50
510	Physical Education	.25
704	Lifetime/Recreation PE	.25
515/516	Strength and Conditioning I and II	.50 (Two Semesters)

HEALTH (500) **semester course 0.5 credit**
Health is a required semester course designed to educate and motivate students towards living a healthy lifestyle. The health curriculum includes mental, social, and physical aspects. Topics to be covered include body systems, mental and emotional development, maturity

and sex education, stress and social development, diseases, nutrition, alcohol, drugs and tobacco, and first aid and safety. Throughout each unit, consumer health and health careers will be discussed as they relate to each topic. Class meets daily for one semester.

PHYSICAL EDUCATION (510) **0.25 Credits per semester**
Physical Education is a semester course and will include football, soccer, speedball and basketball, floor hockey, ultimate Frisbee, whiffle ball, weight lifting and volleyball. For each of the team sports, the origin, history, rules of the game, scoring, strategies will be discussed and practiced. Learning how to play the games correctly and using fundamentals learned will allow the student to enrich their own experience while playing and competing with others during the team sports. Quizzes and tests will be a part of the academic process as well as participation during the course. A change of clothes and tennis shoes are required. Class meets daily for one semester. No Prerequisite is required for this course.

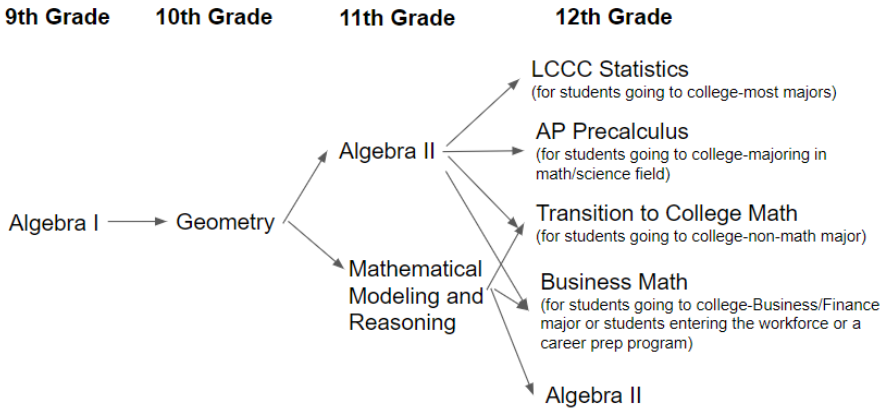
LIFETIME/RECREATION PE (704) **0.25 Credits per semester**
This is a semester course and will include corn hole, evasive games (tag, capture the flag), pickleball, 4-square, badminton, table tennis, low impact exercise/walking and ladder golf. These unique backyard games will be introduced to the students. Learning the rules, scoring and strategies of each game will be the focus of this lighter side of competition. Students will be able to enjoy a less competitive and individual sport setting. Quizzes and tests will be a part of the academic process as well as participation in the activities. Students do not have to change clothes for class, comfortable clothes and tennis shoes are required. Class meets daily for one semester.

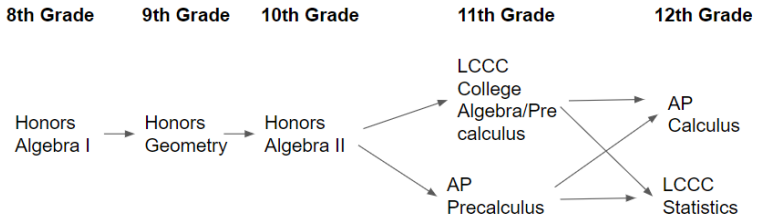
STRENGTH AND CONDITIONING I & II FOR ATHLETES (515/516) **0.5 Credits per semester**
An elective Physical Education Course that is designed specifically for students at Firelands High School who wish to pursue athletics or a similar field in college. Students will receive training in strength and conditioning, designed to fit into their specific athletic program as well as leadership training in a classroom setting. Students who take this class **ARE EXPECTED** to participate in the conditioning program every day, under the direction of the instructor. This class is expected to meet during 10th and is available to all students in grades 9-11 who expect to pursue a career in the athletic field (trainer, therapist, etc.), 9th – 11th graders that are currently participating in athletics, or 11th -12th graders that plan to participate in college athletics. 12th Graders will be allowed by teacher interview only.

MATHEMATICS

Course No.	Course Name	Credit
210	Algebra I	1
211	Honors Algebra I	1
213	LCCC – College Algebra	1
220	Geometry	1
223	Honors Geometry	1
224	Algebra II – A	1
225	Algebra II	1
227	Algebra II – B	1
228	Honors Algebra II	1
231AP	AP Pre-calculus	1
232	LCCC – Pre-Calculus	1
233	Transition to College Mathematics	1
234	LCCC – Statistics	1
235	AP Calculus	1
706	Business Math	1.0

The charts below show the expected progression in Firelands Mathematics courses





ALGEBRA I (210) **1 credit**
This course consists of a study of linear functions (their solutions and graphs) and the solutions of quadratic equations. Heavy emphasis is placed on applying algebra. The student needs a strong background in basic arithmetic (able to work with fractions and decimals). Upon successful completion of this course, students should enroll in Geometry. *It is recommended students own a Texas Instrument 84+ for this and all future math courses*.

HONORS ALGEBRA I (211) **1 credit**
This course is designed for students with better than average mathematical ability and is a fundamental step to Honors and CCP level mathematics. This course moves at a faster pace than the Algebra I course and has a higher level of rigor attached. Students are expected to adhere to a high level of scholarship and will be exposed to deeper mathematical topics, multi-level problems, and extensive use of technology. This course consists of a study of linear functions (their solutions and graphs) and the solutions of quadratic equations. Heavy emphasis is placed on identifying facts in multi-faceted problems and applying algebra skills to find solutions. The student needs a strong background in basic arithmetic (able to work with fractions and decimals). Upon successful completion of this course, students should enroll in Honors Geometry. *It is recommended students own a Texas Instrument 84+ for this and all future math courses*. **Prerequisite: Math 8 grades of B or better (C only with recommendation of teacher)**

GEOMETRY (220) **1 credit**
This course is designed for students with average mathematical ability and is a fundamental step to Honors and CCP level mathematics. The first semester is primarily concerned with the vocabulary of geometry, inductive and deductive reasoning, and formal proofs. The second semester involves the study of more specialized types of figures, including geometric solids. This course also includes an introduction to trigonometry, constructions and coordinate geometry. It is taught with a balance of theory and applications. *It is recommended students own a Texas Instrument 84+ for this and all future math courses*.
Prerequisite: Algebra I

HONORS GEOMETRY (223) **1 credit**
This course is designed for students with better than average mathematical ability and is a fundamental step to Honors and CCP level mathematics. This course moves at a faster pace than the Geometry course, and has a higher level of rigor attached. The first semester is primarily concerned with the vocabulary of geometry, inductive and deductive reasoning, and formal proofs. The second semester involves the study of more specialized types of figures, including geometric solids. This course also includes an introduction to trigonometry, constructions and coordinate geometry. It is taught with a balance of theory and applications. *It is recommended students own a Texas Instrument 84+ for this and all future math courses*. **Prerequisite: Algebra I (from 8th grade) with a B average or better or Algebra I (from high school) with a B average or better and teacher recommendation.**

ALGEBRA II (225) **1 credit**
Algebra II provides a firm foundation of the basic skills and concepts for serious mathematics students who plan to continue in their study of mathematics as well as those choosing other areas of study. This course furthers the understanding of the real number system as studied in first year algebra and extends into the study of the complex number system. It includes an extensive study of systems and functions-quadratic, square root, cubic, polynomial and logarithmic. There is also an introduction to CCP level mathematics. *It is recommended students own a Texas Instrument 84+ for this and all future math courses*.
Prerequisite: Algebra I and Geometry

MATHEMATICS MODELING AND REASONING (237) **Grade 11 1 credit**
Critical thinking and reasoning are the primary objectives and outcomes of this advanced quantitative reasoning course. It includes the application of mathematical skills including algebraic methods to the analysis and interpretation of quantitative information (numbers in context) in real-world situations to make decisions that are relevant to daily life. Additionally, the course emphasizes interpretation, precision, representation, calculation, analysis/synthesis, use of assumptions and communication through student presentations and writing. Students combine problem solving with modeling to analyze real-life situations and devise solution strategies. These habits and skills cut across disciplines, promote perseverance, and provide a gateway into successful postsecondary education and a variety of careers. **Prerequisite: Teacher and Counselor Recommendation**

HONORS ALGEBRA II (228) **1 credit**
Algebra II provides a firm foundation of the basic skills and concepts for the serious mathematics students who plan to continue in the field at the CCP level. This course moves at a faster pace than the Algebra II course, and has a higher level of rigor attached. This course furthers the understanding of the real number system as studied in first year algebra and extends into the study of the complex number system. It includes an extensive study of systems and functions-quadratic, square root, cubic, polynomial and logarithmic. There is also an to CCP level mathematics. . *It is recommended students own a Texas Instrument 84+ for this and all future math courses*. **Prerequisite: Honors Geometry with a B average or better or Algebra I and Geometry with a B average or better in each and teacher recommendation**

AP PRE-CALCULUS (231AP) **1 credit**
AP Precalculus prepares students for other college-level mathematics and science courses. Through regular practice, students build deep mastery of modeling and functions, and they examine scenarios through multiple representations. The course framework delineates content and skills common to college precalculus courses that are foundational for careers in mathematics, physics, biology, health science, social science, and data science. Units include Polynomial, Rational, Exponential, Logarithmic, Trigonometric, and Polar Functions. *Students are required to have their own a Texas Instrument 84+ graphing calculator for this course.*
Prerequisite: Algebra I, Geometry, and Algebra II with a B average or better in each

TRANSITION TO COLLEGE MATHEMATICS **Grade 12** (233) **1 credit**
Transition to College Math is a course to help prepare seniors to effectively handle entry-level mathematics in college. **This course will include one semester of review Algebra I and Algebra II topics to give students a strong algebra background who need additional work in these areas. The other semester will focus on an introduction to Statistics and Probability.** Topics include equations and inequalities, exponents and scientific notation, coordinate graphing, linear systems, polynomials, and rational expressions. *Students are required to have their own Texas Instrument - 84+ graphing calculator for this course.* **Prerequisite: 3 credits earned in mathematics and senior standing.**

AP CALCULUS (235) **1 credit**
This fast paced class is for the advanced student with a solid mathematical background. Topics to be covered include: graph analysis, function limits, continuous functions, first and second derivatives at points and as functions, derivative application, properties of integrals, applications of integrals, and The Fundamental Theorem of Calculus. *A graphing calculator (TI 84+ or TI 89) is required for this class*. All students who sign up for this class must take the AP exam at a cost to the student, which will be added to school fees. Students must score at least a three or better on the AP Exam to be given college credit in this course. Please check with your college or university for their specific AP score requirements. **Prerequisites: C or better in AP Pre-Calculus, or LCCC MTHM 171 & MTHM 172, or a Teacher recommendation. – Fee – AP Exam Fee**

BUSINESS MATH (706) **1 credit**
This course integrates mathematical concepts with common business usage in the areas of accounting, personal finance, economics, marketing, international business, management, and entrepreneurship. This course uses technology and real-world experiences to teach students the basic accounting practices and procedures for operating a business. Students will learn skills that all employers look for in employees including problem-solving, critical thinking and business ethics. Concepts taught include journalizing and posting transactions, preparing financial statements, recording petty cash, and establishing a payroll.

LCCC – COLLEGE ALGEBRA MTHM 171 (213) **1 credit**
Designed primarily for the calculus-bound student. Study of algebraic functions, equations, systems of equations, inequalities, matrices, partial fractions, exponential and logarithmic functions. Not to be taken if credit for MTHM 175 has been earned. *A graphing calculator (TI 84+ or TI 89) is required for this class*. LCCC Mathematics core course. **Prerequisite: High school geometry and Proficient level on Accuplacer Test.**

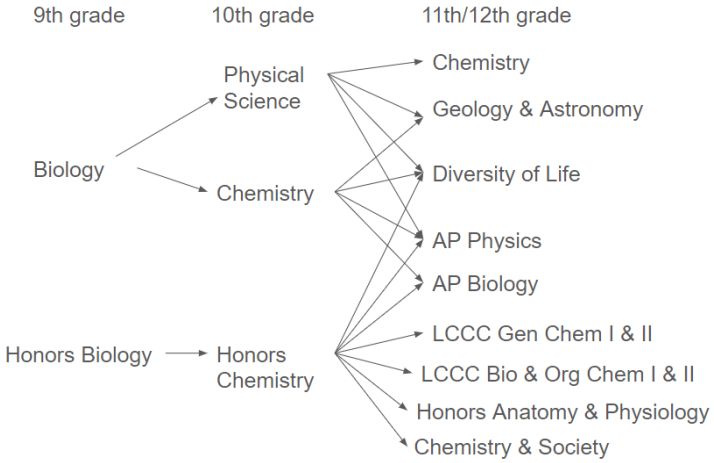
LCCC – TRIGONOMETRY MTHM 174 (MTHM174) **1 credit**
For the calculus-bound student. A study of angles; trigonometric functions and their graphs; trigonometric identities; trigonometric equations and inequalities; trigonometric models; right and oblique triangles; polar equations and graphs; and vectors. Graphing calculator required. LCCC Mathematics core course. **Prerequisite: Grade C or higher in LCCC MTHM 171**

LCCC – STATISTICS MTHM 168 (234) **1 credit**
This course provides a non-calculus based introduction to statistical thinking and statistical methods. The topics discussed in the course include: data collection, data description, basic probability, sampling distributions, probability distributions, confidence intervals and hypothesis tests. An emphasis is placed on using technology to solve problems involving real data and hands-on projects are used throughout the course. *A graphing calculator (TI 84+ or TI 89) is required for this class*.
Proficient level on Accuplacer Test.

SCIENCE DEPARTMENT

Course No.	Course Name	Credit
300	Physical Science	1
305	Biology	1
308	Honors Biology	1
315	Chemistry	1
319	Honors Chemistry	1
317	LCCC - General, Organic and Biochemistry I	1
318	LCCC - General, Organic and Biochemistry II	1
313	LCCC - General Chemistry I	1
314	LCCC - General Chemistry II	1
CHMY155	LCCC - Chemistry and Society	1
325	Biology II/Diversity of Life	1
320	Physics	1
323	A.P. Physics1	1
001204	A.P. Biology	1
321	Honors Anatomy and Physiology	1
326	Geology & Astronomy	1

The chart below shows the expected progression in Firelands Science courses



PHYSICAL SCIENCE (300) 1 credit
Basic concepts of chemistry, physics, and earth science are covered throughout the year. Some of the topics learned in this course include the study of matter, motion, force, energy, waves, earth, and the universe. The continuous changes and advances happening in the world of science will also be monitored periodically throughout the year. ***Fee***

BIOLOGY (305) **1 credit**
Required course for **all** freshmen. Biology is the science that studies life. Ecology, Populations, Biochemistry, Evolutions, Genetics, Photosynthesis, Cellular Respiration, and Cell Structure and Function are topics dealt with in this course. ***Fee***

HONORS BIOLOGY (308) **1 credit**
This rigorous, college bound course, is for students who achieved an A in 8th grade Science. This course will cover topics such as Ecology, Populations, Biochemistry, Evolutions, Genetics, Photosynthesis, Cell Respiration, and Cell Structure and Function will be covered at a level of deep understanding. Emphasis will be placed on analyzing factual-based text and completing labs, utilizing higher order writing skills that let students synthesize class and lab results at a higher order of knowledge. ***Fee***

AP BIOLOGY (001204) **1 credit**
AP Biology is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore topics like evolution, energetics, information storage and transfer and system interactions. This course requires that 25% of the instructional time will be spent in hands-on laboratory work, with an emphasis on inquiry-based investigations that provide students with opportunities to apply the science practices.

CHEMISTRY (315) **1 credit**
A full year course involving the study of matter and the changes it undergoes. Topics include the structure of the atom, ionic and covalent bonding, the periodic table, the mole concept, chemical reactions, and stoichiometry. **Prerequisite: C average or better in Biology.** ***Fee***

HONORS CHEMISTRY (316) **1 credit**
Honors Chemistry is a first-year Chemistry course which focuses on students developing a deep conceptual understanding of matter and energy at the molecular level by asking students to explain their macroscopic observations using particulate-level reasoning. Students will begin their exploration of matter by observing and measuring macroscopic properties of everyday materials and progress throughout the course to explore deeper and more detailed perspectives of the particle nature of matter. Pre-AP Chemistry motivates students to be active participants in applying critical thinking and mathematical skills as they engage in context driven mathematics, data analysis, modeling, and productive collaboration with their peers. **Prerequisite – B or better in Honors Biology or Biology and a teacher recommendation. There is no AP Exam with this course. Fee.**

LCCC – General, Organic and Biochemistry I (317) CHMY 161 **1 credit**
Designed to give the Health and Wellness student an understanding of and appreciation for general chemistry. Includes atomic and molecular structure, intermolecular and intramolecular forces, properties of matter, states of matter, solutions, principles of reactions (including acid-base, redox), and nuclear chemistry. **Prerequisite –score of 30 on ALEKS or 500 on the math portion of the SAT**

LCCC – General, Organic and Biochemistry II (318) CHMY 162 **1 credit**
Continuation of CHMY 161. Emphasis is on organic and biochemistry. Topics include nomenclature; structure classification and typical reactions of organic compounds; and properties, synthesis, and metabolism of carbohydrates, lipids, nucleic acids, and proteins. Role of enzymes, hormones, vitamins, and drugs is also discussed. **Prerequisite –CHMY 161**

LCCC – General Chemistry I (313) CHMY 171 **1 credit**
Course recommended for Science majors an an introduction to the principles of chemistry. Emphasis is on atomic, molecular, and electronic structures, gas laws, stoichiometry, chemical bonding, solutions, and equilibrium. **Prerequisite – score of 46 on ALEXS or 530 on the math portion of the SAT**

LCCC – General Chemistry II (314) CHMY 172 **1 credit**
Continuation of CHMY 171. Emphasis is on acides and bases, thermodynamics, electrochemistry, coordination compounds, nuclear chemistry, descriptive chemistry, and reaction kinetics. **Prerequisite –CHMY 171**

LCCC – CHEMISTRY AND SOCIETY (CHMY155) CHMY 155 **1 credit**
Course designed for non-science and non-Health and Wellness students. An introduction to chemistry presented in the context of current world problems (i.e. ozone depletion, acid rain, and global warming) and commercial products (foods, drugs, plastics). Natural Science Core Course.

BIOLOGY II /DIVERSITY OF LIFE (325) **1 credit**
This course is a continuation of Biology. Diversity of Life includes taxonomy, viruses, kingdoms, body systems, and ecology. Dissection of a crayfish, frog, and cat is required. **Prerequisite: Biology I** ***Fee***

A.P. PHYSICS 1 (323) **1 credit**
This course focuses on the interconnections between the various strands and units contained in the course syllabus and how each contributes to the "Big Ideas" that provide a core foundation for this physics course. Problem solving techniques and strategies are fine-tuned throughout the year, and students are continually tasked with connection physics application learned in different units in order to synthesize solutions to complex problems. All students who sign up for this class must take the AP exam at a cost to the student, which will be added to school fees. Students must score at least a three or better on the AP Exam to be given college credit in this course. Please check with your college or university for their specific AP score requirements. **Prerequisite: B or better in Geometry and/or Algebra II and a teacher recommendation. Also can concurrently be taking Algebra II.** ***Fee – AP Exam Fee***

HONORS ANATOMY AND PHYSIOLOGY (321) **Grades 11-12 1 credit**
This course offers an introduction to cell biology and histology, as well as an in-depth study of the following human organ systems: integumentary, skeletal, muscular, nervous (including special senses) and endocrine, reproductive (including embryology and fetal development), digestive, cardiovascular, lymphatic (including immunity), respiratory, and urinary (including fluid/electrolyte and acid/base balance). Laboratory (involving dissection of specimens and use of pre-dissected cats) required. **Prerequisite: Teacher recommendation**

GEOLOGY & ASTRONOMY (326) **1 credit**
This is a year-long course giving students the opportunity to develop a knowledge and understanding of the Earth, as well as the solar system, galaxy, and universe in which we live. The first semester will be spent exploring the physical geology of the Earth, including

topics such as Earth's history, plate tectonics, rocks and minerals, environmental resources, and glacial geology. During the second semester, students will be introduced to modern concepts in astronomy through topics such as the origin and history of the universe, our solar system and galaxy, astronomical phenomena, and various topics within stellar and galactic astronomy. Careers within these fields will be explored and discussed throughout the year. Students will be expected to complete projects, laboratory activities, and observations of local geological features and astronomical phenomena. **Prerequisites: Successful completion of Physical Science and Biology I**. ***Fee***

SOCIAL STUDIES

Course No.	Course Name	Credit
410	Modern World History	1
412	Honors Modern World History	1
413	LCCC – United States I	1
414	LCCC – United States II	1
415	United States History	1
420	Government	.5
421	Contemporary World Issues	1
PSYCH151	LCCC – Intro to Psychology	1
441	LCCC – American National Government	1
SOCY151G	LCCC – Intro to Sociology	1
408	Firelands TLC	1
707	Macroeconomics	0.5 (Semester)
708	Geography	0.5 (Semester)
001205	World War II	0.5 (Semester)
001206	Ohio History	0.5 (Semester)

MODERN WORLD HISTORY (410) **GRADE 9 1 credit**
This course examines world events from 1600 to the present. It explores the impact of the democratic and industrial revolutions, the forces that led to world domination by European powers, the wars that changed empires, the ideas that led to independence movements and the effects of global interdependence. The concepts of historical thinking introduced in earlier grades continue to build with students locating and analyzing primary and secondary sources from multiple perspectives to draw conclusions.

HONORS MODERN WORLD HISTORY (412) **GRADE 9 1 credit**
This course is designed for the college-bound student and is a rigorous course which will cover world events from 1600 to the present. This course provides a deep understanding of the impact of democratic and industrial revolutions, the forces that led to world domination by European powers, the wars that changed empires, the ideas that lead to independence movements, and the effects of global interdependence. This class will be project based with portfolio assignments to be completed throughout the school year, and a final portfolio notebook to be submitted at the end of the course. This course will prepare students for LCCC US History and LCCC American National Government. The course also places an emphasis on in-depth reading and synthesis of the concepts described above, while stressing document based analysis and utilizing higher order writing skills. **Prerequisite: This course requires two teacher recommendations, one being from an 8th grade Social Studies teacher and another from a teacher of choice, and a B average in both Social Studies and English from the eighth grade year.**

LCCC – UNITED STATES I HSTR 161 (413) **Grades 10 – 12 (Fall Semester) 1 credit**
A study of the origin and growth of American civilization from the discovery of the western hemisphere to the end of the Reconstruction. 3 college credit hours from LCCC.
Prerequisite: Proficient level on Accuplacer Test.

LCCC – UNITED STATES II HSTR 162 (414) **Grades 10 – 12 (Spring Semester) 1 credit**
A political, economic, diplomatic, social, cultural and intellectual survey of the United States from the end of Reconstruction to the present. 3 college credit hours from LCCC.
Prerequisite: LCCC – United States I - Proficient level on Accuplacer Test.

UNITED STATES HISTORY (415) **Grade 10 1 credit**
This course will begin with a quick review of American History up to Reconstruction. It will cover the Enlightenment, Industrialization, Imperialism, World War I, World War II, Civil Rights and the Cold War. Current events will be discussed on a daily basis and incorporated with events of American history for comparison purposes. ***Fee***

GOVERNMENT (420) **Grade 11 1 credit**
This course is an overview of the U.S. political system including political ideology, the U.S. Constitution and events leading to its adoption, the legislative, executive, and judicial branches, civil liberties, voting behavior and elections, taxes, and other political and economic systems.

MACROECONOMICS (707) **Grades 11-12 Semester class 0.5 credit**
Macroeconomics concentrates on the basic economic principles relevant to the resource utilization problems of the economy as a whole. Theories and policies that relate to the economy's total level of output, total income, total level of unemployment, total expenditure, and the general level of prices are treated at an introductory level.

CONTEMPORARY WORLD ISSUES (421) **Grades 11 – 12 Semester class 0.5 credit**
The dynamics of global interactions among nations and regions present issues that affect all humanity. These dynamics include competing beliefs and goals, methods of engagement, and conflict and cooperation. Contemporary issues have political, economic, social, historic and geographic components. Approaches to addressing global and regional issues reflect historical influences and multiple perspectives.

GEOGRAPHY (708) **Semester class 0.5 credit**
This course builds on students' understanding of geography and spatial thinking. Contemporary issues are explored through the lens of geography. In addition to understanding where physical and cultural features are located and why those features are located as they are, students examine the implications of these spatial arrangements.

WORLD WAR II (001205) **Semester class 0.5 credit**
Immerse yourself in the pivotal battles and strategies of World War II in this focused course. Explore the factors that ignited the global conflict, study key theaters such as Europe, the Pacific, and the Eastern Front, and analyze critical battles that shaped the course of the war. Investigate the military tactics employed and their impact on the outcome, while delving into the experiences of soldiers and civilians caught in the midst of the chaos. Gain a concise understanding of the war's historical significance and its lasting influence on the contemporary world.

OHIO HISTORY (001206) **Semester class 0.5 credit**
Ohio History is a semester course overview of Ohio, covering the following topics: Geographical features of Ohio, Native American tribes in Ohio, Early Exploration and Settlement, Ohio in the 19th Century, Ohio in the Civil War, Industrialization and Urbanization, Progressive Era in Ohio, Ohio in the World Wars, Post-War Period and Modern Ohio and Current Issues in Ohio.

LCCC – INTRODUCTION TO SOCIOLOGY SOCY 151 (151) **Grades 11-12 1 credit**
This introductory course is the study of human behavior in society. Its primary focus is on the influence of social relationships on people's attitudes and behavior, and on how societies are established and changed. Some of the topics covered are cultural, deviance, the family, globalization, and social inequality, the mass media, ethnic and race relations, socialization, religion, research methods, and organizations. **Prerequisite: Proficient level on Accuplacer Test.**

LCCC-INTRODUCTION TO PSYCHOLOGY PSYH 151 (PSYH151) **Grades 11-12 1 credit**
An introduction to psychology as the science of behavior and an overview of current psychological thought. Topics include the science of psychology, biological bases of behavior, learning, memory and cognition, motivation, stress and adjustment, personality, psychological disorders and their treatment, and social psychology. Social Sciences Core Course.

LCCC - AMERICAN NATIONAL GOVERNMENT PLSC156 (441) **Grades 11-12 1 credit**
This course provides a survey of national government in theory and practice. Formal governmental structure and procedures studied and made meaningful will be explored with an emphasis on the individual's role in a functioning democracy. Economics is taught during the second semester of American Government. This segment of the course will touch on topics in both Macroeconomics and Microeconomics. Topics in Macroeconomics include the Fundamentals of Economics, Government & the Economy, and the Global Economy. Microeconomics will also be stressed in this course. The topics covered here include Working & Earning, Financial Responsibility & Money Management, Saving & Investing, Economic Decision Making & Skills, Credit & Debt, and Risk Management. 3 college credit hours from LCCC. **Prerequisite: Proficient level on Accuplacer Test.**

FIRELANDS TLC (408) [Teen Leadership Corp] **Grades 11-12 1 credit**
This course is designed to engage students in a meaningful set of community service activities and to develop leadership and problem solving skills. Students will be responsible for planning and participating in events that benefit others. Students will be required to follow up with written reflections on their experiences. **Prerequisite: Completion of an application, student contract, and personal interview.**

FIRELANDS HIGH SCHOOL REGISTRATION PLAN SHEET

Name_____ Date of Graduation_____

Occupation preparing for _____

During the four years of high school a student must complete required units of work as follows:

English	4 units
Social Studies	4 units (3 units – Career Technical)
Science	4 units (3 units – Career Technical)
Mathematics	4 units
Fine Arts	1 unit
Health	½ unit
Physical Education	½ unit
Financial Literacy	½ unit

A minimum of 23 units of credit is required for graduation.

Students going to the Lorain County Joint Vocational School only need 3 credits of Science and Social Studies

FRESHMAN YEAR

1. English I (1 credit)
2. Physical Education (.25 credit) or Waiver
3. Health (.5 credit)
4. Science (1 credit)
5. World History (1 credit)
6. Math (1 credit)
7. Fine Arts (Highly Recommended)
8. _____

SOPHOMORE YEAR

1. English II (1 credit)
2. Physical Education (.25 credit) (if not completed)
3. Science (1 credit)
4. U. S. History (1 credit)
5. Math (1 credit)
6. _____
7. _____
8. _____

JUNIOR YEAR

1. English III (1 credit)
2. Science (1 credit)
3. Government (1 credit)
4. Math (1 credit)
5. _____
6. _____
7. _____
8. _____

SENIOR YEAR

1. English IV (1 credit)
2. Science (1 credit)
3. Social Studies (1 credit)
4. Math (1 credit)
5. _____
6. _____
7. _____
8. _____

All honor and elective classes must have a minimum of 10 students.