

PROGRAM OF STUDIES

2023-2024 school year









# **Planning Your Path to Success**

Lorain County JVS celebrates that student success can come along many different pathways. LCJVS offers students many different routes to achievement, including Industry Credentials, core academics, College Credit Plus, and work-based learning. It is important for students and their families to map out the path they plan to take to accomplish their goals.

# **Scheduling Process**

Current students will make course selections with their counselors and first period Instructors. Incoming students will make course selections upon acceptance. Families should read and discuss this document prior to choosing courses so students can make the best decisions. The schedule will be built in the Spring and finalized over the summer. The only schedule changes permitted once school begins will be for the following reasons:

- Error in a student schedule by LCJVS
- · Course closed due to low enrollment
- Student failure of a prerequisite course
- Adding a course (if room in class for another student)
- Change in a CCP course
- New enrollment to LCJVS
- Changes recommended by an IEP team

# **Student Services**

Students at the Lorain County JVS are served by their Associate School Counselors as well as their LCJVS School Counselors. Students who receive special education services at their Associate Schools will continue to receive services at Lorain County JVS.

Ms. Eliza Dole



Counselor Avon, Avon Lake, Keystone, North Ridgeville

Ms. Joanne Gleason



Counselor Brookside, Columbia, Firelands, Wellington

**Ms. Shannon Meadows** 



Counselor Amherst, Midview, Oberlin

Mr. Chris Wilde



Counselor Clearview, Elyria

**Ms. Denise Scarpucci** 



Special Education Supervisor



Social Worker Grades 9 & 10

**Ms. Kelly Wootten** 



Social Worker Grades 11 & 12



**Ohio's High School Graduation Requirements** 



Before you know it, you'll be receiving your high school diploma. Ohio is giving you new ways to show the world what you can do with it.

As a student entering ninth grade on or after **July 1, 2019**, Ohio's new high school graduation requirements give you more flexibility to choose a graduation pathway that builds on your strengths and passions — one that ensures you are ready for your next steps and excited about the future.

# First, cover the basics

You must earn a minimum total of 20 credits in specified subjects and take your required tests. Then, decide how you will round out your diploma requirements.

English language arts	4 credits
Health	½ credit
Mathematics	4 credits
Physical education	½ credit
Science	3 credits
Social studies	3 credits
Electives	5 credits

#### Other Requirements

You also must receive instruction in economics and financial literacy and complete at least two semesters of fine arts. Your district may require more than 20 credits to graduate.

# Second, show competency

Earn a passing score on Ohio's high school Algebra I and English II tests. Students who do not pass the test will be offered additional support and must retake the test at least once.

Is testing not your strength? After you have taken your tests, there are three additional ways to show competency!



# Demonstrate Two Career-Focused Activities\*:

#### **Foundational**

Proficient scores on WebXams
A 12-point industry credential
A pre-apprenticeship or acceptance into an approved apprenticeship program

#### **Supporting**

Work-based learning
Earn the required score on WorkKeys Earn
the OhioMeansJobs Readiness Seal

# Option



#### **Enlist in the Military**

Show evidence that you have signed a contract to enter a branch of the U.S. armed services upon graduation.

# Option

#### Complete College Coursework

Earn credit for one college-level math and/ or college-level English course through Ohio's free College Credit Plus program.

\*At least one of the two must be a Foundational skil

# Third, show readiness

Earn two of the following diploma seals, choosing those that line up with your goals and interests. These seals give you the chance to demonstrate academic, technical and professional skills and knowledge that align to your passions, interests and planned next steps after high school.

### At least one of the two must be Ohio-designed:

- OhioMeansJobs Readiness Seal (Ohio)
- ☐ Industry-Recognized Credential Seal (Ohio)
- □ College-Ready Seal (Ohio)
- ☐ Military Enlistment Seal (Ohio)
- Citizenship Seal (Ohio)
- ☐ Science Seal (Ohio)
- □ Honors Diploma Seal (Ohio)
- ☐ Seal of Biliteracy (Ohio)
- ☐ Technology Seal (Ohio)
- ☐ Community Service Seal (Local)
- ☐ Fine and Performing Arts Seal (Local)
- Student Engagement Seal (Local)



# **Career-Tech Honors Diploma**

LCJVS students can gain state recognition for exceeding Ohio's graduation requirements through a Career-Tech Honors Diploma. High-level coursework, college and career readiness tests and real-world experiences challenge students.

Students must meet all but one of the criteria below, including all criteria that are also a graduation requirement (such as 4 credits of mathematics). Students can use Advanced Placement, International Baccalaureate, College Credit Plus and Credit Flexibility coursework to meet the unit requirements of the honors diploma. A single course can meet multiple criteria if it fits under multiple subject areas.

#### **CRITERIA FOR CAREER-TECH HONORS DIPLOMA:**

4 Units of Mathematics, including Algebra II

4 Units of Science, including 2 units of Advanced Science

4 Units of Social Studies

2 Units of one World Language

4 Units of Career-Technical courses

3.5 on a 4.0 scale

27 or higher ACT score, 1280 or higher SAT score, OR >6 in Reading for Information and Applied Mathematics on WorkKeys

Successful completion of a field experience and portfolio

Comprehensive Portfolio

Industry-Recognized Credential or achieve proficiency benchmark for appropriate Ohio CT Competency Assessment



# Grades, Credits, Class Schedules Course Credit

You may earn the following credits while attending LCJVS each year:

- Academics and Electives = .5 credit per semester
- Career-Technical Lab = 3 credits per year
- Related (1 Period) = 1 credit per year
- Course Pathway = varies per career-technical program

## **Grade Cards**

Grades are readily available to parents on Canvas. Only end of year grade cards will be mailed home.

#### **Canvas**

Parents and students are encouraged to monitor students' progress using the Canvas LMS. Both parents and students will be provided log on information at the beginning of the school year or at enrollment. Canvas is an LMS, Learning Management System, that makes teaching and learning easier by connecting all the digital tools teachers use in one easy place. Parents can create an observer account in Canvas with their child, allowing them to view grades, upcoming assignments and due dates, missing work, and teacher communication. Teachers can send individual, group, and course-wide messages to students and parents, and students can communicate safely with teachers and each other.

# **Lorain County JVS Grading Schedule**

SCORE LETTER	GRADE	VALUE
90-100	Α	Outstanding
80-89	В	Above Average
70-79	С	Average
60-69	D	Below Average
0-59	F	Failing Work
	1	Incomplete

An incomplete must be made up within two weeks after the end of a grading period; otherwise, an "F" may be entered as the student's grade.

\*College Courses may be graded on a weighted scale.

# **Early Job Placement**

Students on early job placement receive their lab grade from the employer. If a student is fired from their job, they may receive an F in lab for the time spent on the job for that grading period. All requirements and expectations for Early Job Placement are detailed in the Student Handbook.



# **Articulated Credits**

LCJVS graduates may be eligible to receive college credits for the successful completion of program courses. Students who meet all requirements agreed to by LCJVS and the college for the junior and senior years may qualify for articulated credit at LCCC or other post-secondary institutions. Graduating seniors should contact their instructor or the Student Services Office to check their eligibility.

# **College Credit Plus**

Ohio's College Credit Plus program can help students earn college and high school credits at the same time by taking college courses from community colleges or universities. The purpose of this program is to promote rigorous academic pursuits and to provide a wide variety of options to college-ready students. Taking a college course through College Credit Plus is free of charge.

For the 2023-24 school year, the following academic courses may be offered on-site at LCJVS in partnership with LCCC: English Composition 161 and 162. Lab specific college credit plus courses may also be offered.

Students can also take college courses on campus at LCCC and/or online. Students must meet LCCC requirements in order to participate in these courses.

For more information on College Credit Plus, contact the Student Services office or visit the Ohio Department of Education webpage at <a href="http://education.ohio.gov/Topics/Quality-School-Choice/College-Credit-Plus">http://education.ohio.gov/Topics/Quality-School-Choice/College-Credit-Plus</a> or the Ohio Board of Regents webpage at <a href="https://www.ohiohighered.org/ccp.20">https://www.ohiohighered.org/ccp.20</a>.

# **Early Release/Late Start**

Upperclassmen may request early release or late start instead of a study hall if they have availability in their schedule. Neither early release nor late start will be scheduled if a student is credit deficient in any academic area. Students must have their own transportation in order to participate.



#### CAREER-TECHNICAL PROGRAMS

#### **9th Grade Program - Career Readiness**

The Career Readiness Program is designed for 9th-grade students who would excel in a hands-on career-based high school experience. As a high school freshman, you begin to develop the skills and knowledge necessary for acceptance into our junior and senior programs. You spend four quarters in the Career Readiness program learning appropriate safety procedures, using different types of equipment, obtaining skills, and using projects and career modules to help you focus on a successful program choice for your junior year. Placement is based on the program selections from your Lorain County JVS application and current availability. Students qualified to enroll in this program are; Freshmen, 14 years old, and have 0 to 3 high school credits. To be considered for this program a student must have, a school counselor recommendation and an LCJVS application on file.





#### **10th Grade Program - Career Exploration**

The Career Readiness Program is designed for 10th-grade students who would excel in a hands-on career-based high school experience. As a Career Exploration student, you will shadow a different Lorain County JVS career technical lab each quarter. At the end of your sophomore year, you are able to make an informed decision when applying for one of our two-year career technical programs. Students qualified to enroll in this program are; Sophomores, 15 years old, and have 3-6 high school credits. To be considered for this program, a student must have; a school counselor recommendation and an LCJVS application on file.



#### CAREER-TECHNICAL PROGRAMS CONTINUED

#### **Allied Health Sciences**

The Allied Health Sciences program integrates rigorous academic preparation with hands-on technical instruction so you can be successful in your healthcare career! You are exposed to a wide variety of careers in healthcare while learning about medical ethics, infection control, safety, body mechanics, nutrition, communication, employability skills, teamwork, and professionalism. College credits are available upon successful completion of this program.



### **Automotive Technology**

Learn to diagnose, repair, and adjust all phases of automotive mechanics while working on gas, hybrid, and diesel engines. You will use the latest automotive testing equipment including computerized diagnostic equipment.



### **Bakery & Pastry Arts**

Learn the basic techniques of baking and then move into more advanced methods working with marzipan, chocolate, and meringues. The science of baking is included in the course as well as sanitation procedures and safety practices. During your program, you will work in an on-site bakery with modern equipment as you train for a career in the industry!



#### CAREER-TECHNICAL PROGRAMS CONTINUED

#### **Career-Based Intervention**

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.

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.

#### **Carpentry**

Learn basic carpentry skills to repair, construct, and remodel buildings and homes in a real-world practical setting. The program includes the layout of floors, walls and rafters, framing, stairway construction, and interior/exterior trim and finish.



#### **Collision Repair**

Work on vehicles requiring frame and body straightening, welding, refinishing, and painting. Your training will include replacing glass, installing upholstery, estimating costs of parts, labor, and preparation of insurance forms.





#### CAREER-TECHNICAL PROGRAMS CONTINUED

#### **Commercial Truck Technology**

Learn to repair and maintain diesel engines that power transportation equipment such as heavy trucks and buses. In addition to basic skills such as welding, using oxyfuel equipment, and digital electronics, you will learn to service, repair, and maintain vehicles using hand and power tools as well as modern computer diagnostics.



### **Cosmetology**

Receive instruction and hands-on training in the art and science of hair, skin, and nail care. You will receive technical, practical, and customer service skills in both a classroom and salon environment. In your senior year, you will operate an in-house, full-service salon and are eligible to take the State Board of Cosmetology licensing examination.



### **Culinary Arts**

The Culinary Arts program trains students in all areas of the demanding and competitive world of food service. Basic cooking techniques, baking, salad preparation, cafeteria operation and advanced culinary skills are taught by chef instructors and guest chefs. Students operate a full-service restaurant in their senior year and cater functions before, during and after school.



#### CAREER-TECHNICAL PROGRAMS CONTINUED

#### **Cybersecurity & Networking**

Evaluate, configure, and troubleshoot computer and mobile device hardware and operating systems to include Windows, Mac OS, Linux, Android, and iOS. You will learn the fundamentals of networking to include protocols, structured cabling, switching, routing, servers, and wireless connectivity and how to secure these networks. CompTIA A+, Network+, Security+, and Cisco CCNA certifications are covered in the course.



#### **Digital Media Arts**

Study film, video, and video production in our Digital Media Arts program. Learn the fundamentals of computer-based design using a variety of media, such as high-definition video, sound, animation, installation art, print, and digital photography. You will work in a digitally integrated computer lab and studio to gain hands-on experience. Apply color theory, visual design, and conceptualization to project-based assignments that focus on growing your skill sets and technical abilities, while building a portfolio for post-secondary and internship opportunities. During this program, you will create content that can be applied to a career in video/film production, 2D/3D animation, photography, and print media.



#### **Early Childhood Education**

Teach three to five-year-old children in our ODE licensed preschool classrooms! Plan, conduct, and assess developmentally appropriate lessons and activities, and promote exploration and discovery through learning. Plan field trips, carry out assessments, provide ongoing communications to parents, conduct parent-teacher conferences, and develop a positive relationship with your preschool students. Gain experience working with infants, toddlers, and school-age students at local daycare centers, Head Start programs, and elementary schools. You will have the opportunity to earn 120 classroom hours towards a National Child Development Association credential.





#### CAREER-TECHNICAL PROGRAMS CONTINUED

#### **Engineering Design and Technologies**

Prepare solid models and detailed technical drawings used to build products like bridges, automobiles, skateboards, gaming systems, and more. You will have the opportunity to learn manual and computer aided design skills; build handson models and prototypes; use software packages such as AutoCAD, SolidWorks, Inventor, and REVIT Architecture; perfect precision measurements and gain introductory machining skills through projects with our Precision Machine Technology program; receive introductory welding skills through projects with our Welding and Fabrication program; and others to enable your designs to come to life! During your senior year, you will use modeling software to design your own dream home and create a scaled mode along with all necessary blueprints used in construction. You will also train in coding and flight of small and large unmanned aircraft systems (sUAS Drone).



### **Heating and Air Conditioning**

Learn to install and repair air conditioning and heating units used in homes, offices, and businesses. You will layout and fabricate ductwork, electrical components, and pipe fittings. During your senior year, you have the opportunity to take the Environmental Protection Agency (EPA) test for handling refrigeration to receive EPA certification.



# **Hospitality Services - A/B**

Hospitality Services - A is a one year training program which requires a special recommendation from your school counselor. You learn basic skills used in the hotel and restaurant industry, ranging from basic food preparation to housekeeping.

Hospitality Services - B is a one year training program which requires a special recommendation from the student's school counselor. In this program, you focus on developing employability skills necessary to advance in the food service and hotel industry. You participate in lab activities with the Culinary Academy, and working at the Hotel at Oberlin. This program allows you to work with the most up-to-date equipment as you begin to train for a career in the industry.





#### CAREER-TECHNICAL PROGRAMS CONTINUED

### **Industrial Electricity**

In Industrial Electricity, you will maintain and install motors, transformers, control instruments, lighting systems, and other types of electrical equipment used in industrial and residential settings. You will also learn about computer programmable controls, conduit bending, and installation of commercial and industrial wiring.



#### **Industrial Equipment Mechanics**

Repair and maintain gasoline and diesel systems that power items such as agricultural equipment, bulldozers, cranes, and forklifts. Small engine repair, such as lawn and garden tractors and recreational equipment, is also covered.



## **Job Training Program**

The Job Training Program is a one-year training program that requires a special recommendation from the student's school counselor. The program assists students in understanding their abilities, provides work opportunities that will help a student work to their individual potential, and helps students match their goals with realistic training programs, employment opportunities, and independent living options. Students learn basic work skills such as following written or sample directions; staying on task; working with good speed and quality in order to meet deadlines; being on time and staying on schedule; and soft skills such as appropriate communication with co-workers, supervisors, and employees from other departments.



#### CAREER-TECHNICAL PROGRAMS CONTINUED

#### **Landscape & Greenhouse Management**

In Landscape and Greenhouse Management, you are introduced to a diversity of career opportunities within the year-round green industry. Learn aspects of landscape design; greenhouse management and production; equipment operation and maintenance; golf course and sports turf management; floral design; garden center operation; customer service; and business management.



#### **Maintenance Services A/B**

Maintenance Services is a training program that requires a special recommendation from your associate school counselor. During this program, you explore basic carpentry, plumbing, electrical, roofing, drywall installation and repair, painting, and residential property maintenance skills. You learn the proper use of hand tools and power equipment and explore the latest green building materials and methods related to the residential construction industry. This program fosters a problem-solving environment where you can apply real-world scenarios to the subjects studied in class and gain a sense of pride and responsibility for your actions and impact on the environment.

This program has a pre-apprentice agreement with the Carpenters Union.



### **Marketing and Entrepreneurship**

Develop and implement marketing and management strategies and techniques in the Marketing and Entrepreneurship program. You will develop digital and social media promotions, and learn the aspects of operating a business by managing the school's Corner Shoppe. Sports, entertainment, and fashion marketing and management also are emphasized.





#### CAREER-TECHNICAL PROGRAMS CONTINUED

#### **Masonry Trades**

Learn the basics of working with brick, block, stone, and concrete as well as other materials such as marble, glazed tile, and structural tile. You will be taught to use hand tools and bonding materials as you learn to construct walls, partitions, fireplaces, and chimneys.



### **Precision Machine Technology**

In Precision Machine Technology, you will use lathes, drill presses, milling machines, and hand tools to make parts or one-of-a-kind items for companies who produce everything from cars to computers. Math instruction is related to part dimensioning, tool geometry, speed and feed calculations, and quality control. An emphasis is placed on bench work and heat treatment of various metals. The use of computer numerical control (CNC) equipment is covered during your senior year.



## **Project Lead the Way | Engineering**

PLTW Engineering is a national high school college tech-prep curriculum designed to help you succeed in engineering, science, and technology careers. The program curriculum is developed on a national level by Project Lead the Way and their network of national Master Teachers and Industry Partners. The PLTW program at Lorain County JVS has achieved several National Awards for program design, program outcomes, and excellence in instruction. We offer you the opportunity to survey the major fields of engineering and prepare you to choose your path to success in college engineering coursework.



#### CAREER-TECHNICAL PROGRAMS CONTINUED

### **Public Safety**

A wide variety of practical learning experiences and related classroom activities help prepare you for careers in public safety and protective services. After this program, you will be prepared to take the Ohio Firefighter II Certification test and the National Registry Exam for EMT/B certification. You will have the opportunity to earn several additional professional certifications during this two-year course of study.



#### **Sports, Health and Fitness Technology**

Sports, Health & Fitness Technology focuses on anatomy, exercise physiology, strength and conditioning, nutrition, medical terminology, sports medicine, and therapy techniques. A core body of knowledge (e.g., communication, group collaboration, legal and ethical responsibility, health and safety) is provided to prepare you for the 21st-century workforce. The curriculum is driven by industry standards that prepare you for a variety of certifications/licenses.



### **Teacher Education Exploration**

The Teacher Education Exploration program encourages high school seniors to explore the field of education and enter the teaching profession by providing them with the support and training necessary for success as both students and teachers. As a student in this program, you will receive four credits for classroom work and internship experience in local elementary, middle, or high schools. Depending on your associate school, this program may take place at Lorain County JVS or Lorain County Community College.

Teacher Education Exploration is a one-year training program that requires a special recommendation from your school counselor. It is open to high school seniors.



#### CAREER-TECHNICAL PROGRAMS CONTINUED

## **Web and Graphic Design**

In Web & Graphic Design, you will become skilled in transforming images with photo editing techniques and digital cameras. Visual design principles and technical art skills come into play when learning to design, develop, and produce interactive media projects, websites, graphics, animation, game design, and social media contexts.



### **Welding & Fabrication**

As a Welding & Fabrication student, you are trained in all processes of welding including stick, Metal Inert Gas (MIG), Tungsten Inert Gas (TIG), and flux core. You will gain knowledge of oxyfuel and plasma arc cutting, along with learning to layout, fabricate and weld actual projects to industrial standards. Customer projects are an important part of the program.



# **Career Tech Electives**

#### Architecture Design - Structural and Mechanical/Electrical/Plumbing

For students enrolled in Carpentry, Engineering Design & Technology, Heating & Air Conditioning, Industrial Electricty and Masonry Trades.

Students will use architecture design principles to organize and arrange structures to create a perspective of a building. Students will use orthographic/pictorial projection, freehand technical sketching and computer-aided drafting (CAD) skills to generate floor and wall plans, elevations, sections, details and schedules. Students will develop sets of structural framing and mechanical working drawings that include plumbing, HVAC and electrical power and lighting plans.

#### **Automotive Engine Performance**

For students enrolled in Commercial Truck Technology and Industrial Equipment Mechanics

Students will research vehicle service histories using model specific service bulletins. Students will test and diagnose for engine performance in fuel, air induction and exhaust systems using advanced testing procedures. Topics include computerized engine controls including retrieving and recording diagnostic trouble codes using On Board Diagnostics (OBD). Additionally, students will diagnose drivability and emissions problems resulting from malfunctions of interrelated systems.

#### **Manufacturing Operations**

For students enrolled in Engineering Design & Technology and Precision Machine Technology

Students will learn the production processes applied across manufacturing operations. Students will be able to demonstrate a broad array of technical skills with an emphasis given to quality practices, measurement, maintenance and safety.

### **Welding Technologies**

For students enrolled in Welding & Fabrication

Students will use fundamental welding principles involving shielded metal arc, oxyacetylene, gas tungsten and gas metal arc welding in the flat, horizontal and vertical positions. An emphasis is given to electrode selection, equipment setup, operating procedures, welding inspection and testing. Students will learn joint designs and layout and will be introduced to welding codes and standards. Additional topics include employability skills and an emphasis will be given to personal safety.



#### **ENGLISH/LANGUAGE ARTS**

All students must complete 4 credits of English Language Arts in order to earn a high school diploma.

The suggested sequence of courses is as follows:

9	<b>Options:</b> English 9, English 9 Honors
10	<b>Options:</b> English 10, English 10 Honors
11	<b>Options:</b> English 11, CCP English 161, CCP English 162
12	<b>Options:</b> English 12, Technical Writing I and Technical Writing II, CCP English 161, CCP English 162

Students can choose to take .5 credit of English 12 paired with .5 credit of either Technical Writing I or II or CCP English 161.

CCP English 161 is only offered 1st semester, CCP English 162 is only offered 2nd semester.

#### **CCP English 161**

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.

#### **CCP English 162**

A writing course continuing the practice of skills introduced in ENGL 161, as well as strategies of argumentation and secondary research leading to a research paper.

#### **English 9**

English 9 is a foundations course that follows academic content standards around reading, vocabulary development and comprehension, the writing process, and communication skills such as speaking and listening. Students will be exposed to various types of literature and will develop critical thinking skills.

### **English 9 Honors**

English 9 Honors approaches the same academic content standards as English 9 but with increased depth and breadth. High level critical thinking skills will be consistently incorporated. Students who are preparing for CCP coursework later in their high school careers should strongly consider taking this course. Parent permission required.

### **English 10**

English 10 continues to develop skills that follows academic content standards around reading, vocabulary development and comprehension, the writing process, and communication skills such as speaking and listening. Students will be exposed to various types of literature and will develop critical thinking skills. An End of Course Test is required by the Ohio Department of Education in order to be eligible for graduation.

#### **English 10 Honors**

English 10 Honors approaches the same academic content standards as English 10 but with increased depth and breadth. High level critical thinking skills will be consistently incorporated. Students who are preparing for CCP coursework later in their high school careers should strongly consider taking this course. Instructor recommendation required.

#### **English 11**

English 11 follows academic content standards around reading, vocabulary development and comprehension, the writing process, and communication skills such as speaking and listening. Students will be exposed to a wide variety of American Literature. There is a research component to this class, as well as a career development unit.

### **English 12**

English 12 follows academic content standards around reading, vocabulary development and comprehension, the writing process, and communication skills such as speaking and listening. Students will be exposed to British and World Literature. There is a research component to this class.



#### Technical Writing I and II

Technical Writing is a senior level course for students wishing to earn an English credit. Students develop writing skills by building a comprehensive Career Portfolio. They will create an updated resume, references and cover letter and will curate work samples from lab to highlight their experience from their time at LCJVS. Students will speak in small groups, present projects, participate in mock interviews, write research projects and analyze their future career. This course is a good choice for any student, whether they be heading to college or preparing to enter the job force.

#### **MATHEMATICS**

All students must complete 4 credits of Mathematics in order to earn a high school diploma. One of these courses must be Algebra II. Suggested sequences of courses are listed below. Students should follow the sequence that is recommended by their math teacher.

9	Algebra I A	Algebra I	Geometry
10	Algebra I B	Geometry	Algebra II
11	Geometry	Algebra II	Advanced Math Options as listed in current course guide
12	Foundations of Algebra II Algebra II	Advanced Math Options as listed in current course guide	Advanced Math Options as listed in current course guide

# Algebra I

The first course in a four-year sequence that addresses the high school portion of the New Learning Standards for Mathematics. Algebra is designed to enable the student to describe patterns, work with formulas, discuss unknowns in problems, and graph ideas. Geometric concepts will also be introduced and developed. It emphasizes student participation in discussions, reading, and problem-solving. An End of Course Test is required by the Ohio Department of Education in order to be eligible for graduation. This course can be taken in a two-year sequence with teacher/counselor recommendation.

## Algebra I A/B

This two year course sequence is designed for the student who may benefit from moving through advanced mathematical concepts at a slower pace.



#### **Geometry**

The second course in a four-year sequence that addresses the high school portion of the New Learning Standards for Mathematics. Geometry is designed to enable the student to visualize patterns. It includes coordinates and transformations in both two and three dimensions, as well as measurement. It emphasizes student participation in discussions, reading, and problem-solving. End of Course Test is required by the Ohio Department of Education.

#### Foundations of Algebra II

This course is similar to Algebra II but will not be taught to the depth and rigor of the Algebra II course. It includes topics covered in Algebra, as well as exponential, logarithmic, and polynomial functions. This course cannot be used as an NCAA Core Course.

#### Algebra II

This is the third course in a four-year sequence that addresses the high school portion of the New Learning Standards for Mathematics. Algebra II is designed to enable the student to extend the study of Algebra. It includes topics covered in Algebra, as well as functions (exponential, logarithmic, polynomial, etc.). It emphasizes student participation in discussions, reading and problem-solving.

#### **Math IV**

This course is intended for the student needing an introduction to technical mathematics in preparation for college-level technical mathematics. The topics studied include units of measure, approximate numbers, equations, inequalities, functions, factoring, rational expressions, exponents, radicals, complex numbers, and Trigonometry. Special emphasis will be given to the practical application of topics from elementary Algebra and elementary Geometry.

#### **Pre-Calculus**

This is the fourth course in a four-year sequence which addresses advanced content in Number and Quantity, Algebra, Functions, Geometry, and Statistics and Probability, and/or the conceptual underpinnings of Calculus. Pre-Calculus is designed to enable the student to extend ideas about functions and early Calculus concepts. There is a heavy emphasis on Trigonometry. Other topics include conics, polar coordinates, exponential and logarithmic functions, probability, and limits. It emphasizes student participation in discussions, reading, and problem-solving.

#### **Statistics**

Statistics is a course for the college-bound student. It introduces the student to the areas of probability theory and statistical inferences. Emphasis will be placed on measures of central tendency, data representation, probability distributions, and topics of random variables.



#### **SCIENCE**

All students must complete at least 3 credits of Science in order to earn a high school diploma. This must include 1 credit in physical sciences, 1 credit in life science and 1 credit of advanced study in one of the following sciences: chemistry, physics or other physical science, advanced biology or other life science, astronomy, physical geology or other earth or space science.

Students can choose 1 credit (full year) courses or combine .5 credit (semester) courses, so long as the requirements above are met.

The suggested sequence of courses is listed below:

9	Physical Science	Biology
10	Biology	Chemistry
11	Option	Option
12	Option Anatomy and Physiology Fundamentals of Anatomy and Physiology Astronomy Chemistry Human Body Systems Forensic Science Material Science Environmental Science Principles of Biomedical Science Vertebrate Zoology	Option  Anatomy and Physiology Fundamentals of Anatomy and Physiology Astronomy Human Body Systems Forensic Science Material Science Environmental Science Principles of Biomedical Science Vertebrate Zoology

# Anatomy and Physiology (1 credit Advanced Life Science)

This year long Anatomy and Physiology course is for students entering health care or public safety professions. It builds on the foundation of Biological Science. Cell biology is covered in more depth and extended. The course also offers an in-depth study of human organ systems. Virtual dissection labs are required as a part of this course.

# Fundamentals of Anatomy and Physiology (.5 Advanced Life Science)

Anatomy is the study of the structures of the human body. Physiology is the study of the functions of the human body. There are 10 organ systems. Systems studied will be decided by student interest.



#### **Biology (1 credit Life Science)**

This course is designed to introduce students to the Science processes, basic skills, and concepts related to a wide range of biological topics. Students will develop the ability to combine concepts and principles. This course includes both demonstrations and lab experiences. Topics covered will include the nature of scientific inquiry, biochemistry, cell biology, genetics, ecology, evolution, and classification of life. An End of Course Test is required by the Ohio Department of Education in order to be eligible for graduation.

# Astronomy (.5 credit Advanced Earth and Space Sciences)

Astronomy introduces students to the composition and structure of the universe. It includes discussion of the nature of our solar system as well as the evolution of stars, galaxies, and the universe.

#### **Chemistry (1 credit Advanced Science)**

This introductory course examines the structure of matter, its properties, and the changes it undergoes. Major topics include atomic theory, chemical formulas and equations, the periodic table, stoichiometry, solution chemistry, behavior of gases, thermochemistry and acids and bases. Includes practical applications of Chemistry to various industries (e.g. construction, metals, food, plastics, ecology, the home).

### Human Body Systems (1 credit Advanced Life Science)

Students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis in the body. Exploring Science in action, students build organs and tissues on a skeletal manikin; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; and take on the roles of biomedical professionals to solve realworld medical cases. (Students must be concurrently enrolled in either the Allied Health Sciences, Public Safety or Sports, Health and Fitness Technology program.) *Prerequisite Course: Principles of Biomedical Science*.

# Environmental Science (1 Credit Environmental Science)

Environmental Science uses investigation to explore and understand nature in a way that incorporates biology, chemistry, physics, and geology. Students will incorporate scientific reasoning, analysis, communication, and real world applications throughout their time in the course.

#### **Forensic Science (.5 Advanced Science)**

Forensic Science is the application of science (chemistry, physics, and biology) to the criminal and civil laws that are enforced by police agencies in a criminal justice system. This class will take a closer look at today's forensic science techniques and give students hands-on experience working with modern day biotechnology.

### Material Science (1 Credit Advanced Earth Science)

This course will include study of the composition, structure, and properties of various materials. Topics will include safe laboratory practices, matter and properties, crystal structure, metals, ceramics, polymers, and composites. Scientific methods will be used to gather, analyze, and represent data in a variety of ways including topics from life and physical science and current events/phenomena. The principle means of learning will be laboratory investigations through creative and sometimes artistic hands-on activities. Guest speakers and field trips may be included to gain an appreciation for the use of materials in manufacturing and technology.

# Principles of Biomedical Science (1 credit Advanced Life Science)

In this course, students explore concepts of biology and medicine as they take on roles of different medical professionals to solve real-world problems. Over the course of the year, students are challenged in various scenarios including investigating a crime scene to solve a mystery, diagnosing and proposing treatment to patients in a family medical practice, tracking down and containing a medical outbreak at a local hospital, stabilizing a patient during an emergency, and collaborating with others to design solutions to local and global medical problems. (Students must be concurrently enrolled in either the Allied Health Sciences, Public Safety or Sports, Health and Fitness Technology program.)



#### **Physical Science (1 credit Physical Science)**

Physical Science is the study of the structure and states of matter, motion, forces, work, energy, heat and temperature, sound, light, electricity, and magnetism. Additional topics include the solar system, the atmosphere and the use of natural resources.

### Vertebrate Zoology (.5 credit Advanced Life Science)

Vertebrate = a backbone. Zoology = the study of animals. Vertebrate Zoology is the study of animals with a backbone (excludes humans). Animals chosen will be based on student interest. There WILL BE dissections.

#### **SOCIAL STUDIES**

All students must complete at least 3 credits of Social Studies in order to earn a high school diploma. These credits must include at least .5 credit in American History, .5 credit in American Government and .5 credit in World History. Suggested sequences of courses is listed below. Students should follow the sequence that is recommended by their school counselor. Financial Literacy is a required course but cannot be used to satisfy the 3 credit requirement.

9	World History
10	US History
11	Civics/Government
12	<b>Options:</b> Early Military History, Modern Military History, Modern Social Issues, Psychology and Sociology

### **US History (1 credit)**

American History is classified as 1877-Present. Topics covered include: Industrialization, Imperialism, 20th Century Conflict, the US in the 20th Century, Cultures, Interaction, Diffusion, Geography, Human Environmental Interaction, Movement, Economics, Markets, Government and the economy, Government Rules and laws, Citizenship rights and responsibilities, participation, Social Studies skills and methods, Communicating information. An End of Course Test is required by the Ohio Department of Education in order to be eligible for graduation.

### Civics/Government (1 credit)

Students will gain a comprehensive understanding of how our government formed and how it evolved into the institutions we rely on today. Civics includes lessons on history, American documents and financial literacy (economics). Students will learn about opportunities for civic engagement within the structures of government. All students learn about the process to register to vote, to request absentee ballots, and to participate in the election process. They explore the rights and responsibilities that come with citizenship. An End of Course Test is required by the Ohio Department of Education in order to be eligible for graduation.

## **Early Military History (.5 credit)**

Early Military History is an historical survey class reviewing past wars that the United States has been involved. The course will include US History and Word History issues. The course allows students to study American military history from the French and Indian War to Spanish/American War. Topics covered follow a wide range of areas such as food, equipment, clothing, weaponry, tactics and overall strategy. The sacrifices of those who protect us and our country's ideals are explored and appreciated.

### Modern Military History (.5 credit)

This course is the study of American Military History from the Revolutionary War to modern times. Through the looking glass of such things as food, equipment, clothing, students will experience the historical transitions. The sacrifices of those who protect us and our country's ideals are explored and appreciated. The students will interact with veterans who have been in combat.



#### **Modern Social Issues (1 credit)**

Modern Social Issues explores contemporary problems facing people in our modern world and seeks to understand the history and evolution of these issues over time. Both foreign and domestic issues are studied, and students are encouraged to take positions of support or opposition and then synthesize potential solutions and finally, defend their ideas after gathering adequate background information on the many areas we explore. In the end, the goal is a better personal understanding of today's complex world and the individual student's place in these situations.

#### Psychology (.5 credit)

This elective will introduce students to the field of psychology. Topics may include body and mind, learning and cognition, development, personality, health and adjustment, disorders, etc. Case studies may be explored.

#### Sociology (.5 credit)

This elective will introduce students to the field of sociology. The focus is more on society than the individual. Topics may include religion, education deviance, mass media, etc. Case studies may be explored.

#### **World History (1 credit)**

World History covers the Enlightenment to Present Age, addressing: Enlightenment ideas: 1690-1776, Industrialization: 1700-1900, Imperialism: 1850-1914, 20th Century Conflict: 1900-1999, People in Societies, Geography, Economics, Government, Citizenship rights and responsibilities, Social Studies skills and methods.

#### Financial Literacy (.5 credit)

In Financial Literacy, students will analyze, manage, and communicate about personal financial conditions that affect material well-being. It includes the ability to make financial decisions, discuss money and financial issues, plan for the future, and respond to life events that affect every day financial decisions.

#### **HEALTH**

Health focuses on the three aspects of holistic health: mental health, social health, and physical well-being. This course will include topics related to promoting wellness and disease prevention; health advocacy and decision-making skills; teenage dating violence (State mandated); teenage suicide prevention (State mandated); teenage abstinence and pregnancy prevention; communicable disease and sexually transmitted infections; and noncommunicable diseases and disabilities.



# **About Lorain County JVS**

Founded in 1971, the Lorain County JVS offers accredited career-technical education for high school students in grades 9-12 and adult learners. Through our programs, our students gain the skills, knowledge, and training needed to be a success in their careers. Located on a 100-acre campus in Oberlin, Ohio, LCJVS is one of the largest career tech schools in the state. We serve high school students from 13 school districts: Amherst, Avon, Avon Lake, Clearview, Columbia, Elyria, Firelands, Keystone, Midview, North Ridgeville, Oberlin, Sheffield-Sheffield Lake and Wellington, along with adult learners from surrounding communities.

# **Mission**

We create opportunities for students to achieve success in their careers.

# **Vision**

By 2023, the Lorain County JVS will be the model Career and Technical Education Center in the state of Ohio.

# **Core Beliefs**

- · We believe in the engagement of all stakeholders.
- We believe in providing pathways of success for all students.
- We believe in a rigorous and relevant curriculum that increases achievement.
- We believe in recruiting, developing and retaining highly qualified employees.
- · We believe we are all responsible for the success of students.
- We believe in developing and sustaining partnerships.



# **Lorain County JVS Board of Education**

The Lorain County JVS Board of Education is the policy-making body for the Lorain County JVS. Each of the 13 associate school districts appoints one of their board members to serve on the LCJVS Board of Education.

#### **Amherst**



Mr. Rex Engle President

#### Avon



**TBD** 

#### **Avon Lake**



Mr. Chuck Froehlich

#### **Clearview**



Mr. Michael Mielcarek

### Columbia



Mr. Stephen Coleman

# **Elyria**



Ms. Annie Carstarphen

# **Firelands**



Mr. Dwayne Becker

### **Keystone**



Ms. Deborah Melda Vice President

### **Midview**



Ms. Kathy Quintiliano

# N. Ridgeville



Ms. Joanne Timura

### **Oberlin**



Ms. Anne Schaum

## **Sheffield**



Ms. Sandy Jensen

# Wellington



Mr. Ayers Ratliff

The Lorain County Joint Vocational School District does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities, and provides equal access to the Boy Scouts and other designated youth groups.

