

Lowell High School Curriculum Guide 2022-23



We are dedicated to the educational
achievement and the success of every
student.

Dear Lowell Parents and Students,

Welcome to Lowell Jr. /Sr. High School.

We are committed to providing our Lowell students with a rigorous and meaningful educational experience. The Lowell School District offers academic programs designed to offer every student the opportunity to grow academically and mature as a productive citizen of the community and world around them.

The Lowell staff is committed to helping every student fulfill his/her potential. We know that participation in activities outside of the classroom contributes to student engagement and academic achievement. We measure our success as a school in terms of the achievement of our students. Our collective goal is the success of all students.

We have high aspirations for our students and expect them to:

- . Be engaged in what is happening around them and in their own learning.
- . Stretch themselves and take challenging courses.
- . Give all work their best effort.
- . Treat all members of our school community with respect.
- . Participate in the activities and programs available to them.
- . Graduate from Lowell prepared to pursue their next steps beyond high school.

This planning guide is an essential tool in making the important educational decisions that lie ahead. As you look through the guide, you will find information on graduation requirements, college admission standards, and course descriptions. As you prepare to forecast for coursework, it is important to review the minimum graduation requirements for graduation. Please note the addition of the Essential Skill/Common Core State Standards proficiency requirements in reading, writing, and mathematics.

Staff members are available to answer any questions you may have and we encourage you to seek their advice as you work through the scheduling process.

Sincerely,

The Staff of Lowell Jr./Sr. High School

Table of Contents

State Graduation Requirements	3
OUS Graduation Requirements	5
College Credit/Advanced Placement Courses	6
Career Development	7
Career Pathways	8
Academic Recognition	11
Applied & Fine Arts	13
Career and Technical Education	17
Health & Physical Education	22
Language Arts	25
Mathematics	28
Other Subjects	32
Science	34
Social Studies	39
World Languages	42
Support Services	43

Lowell's ability to offer the courses listed in this catalog is contingent upon several factors:

- . 1. Courses are dependent on enrollment of students. If an insufficient number of students request a course, it may not be offered in a given year.
- . 2. Instructional Staff: In some cases, students may need to take an online class if certified staff is not available for a given advanced course of study.
- . 3. Some courses may be offered every other year.

GRADUATION REQUIREMENTS

We believe that every student, with effort and support, has the capacity to meet the proscribed graduation requirements. Students will work with high school staff to create and follow a personalized plan to meet these standards and be prepared to succeed in college and the sophisticated work environment.

ESSENTIAL SKILLS/COMMON CORE STATE STANDARDS:

Students must demonstrate proficiency in a variety of areas.

- Read and comprehend a variety of text.
- Write clearly and accurately.
- Apply mathematics in a variety of settings.
- Listen actively and speak clearly and coherently.
- Think critically and analytically.
- Use technology to learn, live, and work.
- Demonstrate civic and community engagement.
- Demonstrate global literacy.
- Demonstrate personal management and teamwork.

PERSONALIZED LEARNING:

Each of the following requirements personalizes the diploma and helps students prepare for their post-graduation goals. Activities and experiences are imbedded in students' courses in grades 7-12 and enable them to plan for these goals.

Plan and Profile:

Students work with school staff to develop a plan about how to use high school to develop their strengths, skills, interests and talents. Courses are selected in alignment with students' interests to guide their learning, document academic achievement, and help them progress toward their personal and professional goals.

Career-related Learning Experiences:

Students participate in experiences that connect classroom learning with real life in the workplace, community and school.

Extended Application:

Students apply and extend their knowledge in new and complex situations related to the student's personal and career interests and post-graduation goals. At Lowell, developing and passing a senior project meets this requirement.

GRADUATION REQUIREMENTS

Lowell High School Diploma Requirements at a Glance

SUBJECT	CREDITS
English/Language Arts	4
Mathematics 1 credit Algebra I & 2 credits above Algebra I ¹	3
Science 3 credits scientific inquiry (2 cr. with lab experiences) ^{1,2}	3
Social Sciences (US History, Personal Finance, Government and Western Geography)	3
Physical Education	1
Careers	.5
Health	1
Applied Fine Arts (Second Language, Arts, Career & Technical Education)	3
Electives	5.5
Total Credits	24
PERSONALIZED LEARNING	
Education Plan & Profile	X
Career-Related Learning Experiences	X
Career-Related Learning Standards	X
Extended Application/Senior Project	X
¹ Applied and integrated courses aligned to standards can meet credit requirements. ² Lab experiences can take place outside of the school in field-based experiences. ³ The state phased in Smarter Balanced Assessment during the 2014-2015 school year	

IMPORTANT NOTE: Students are accountable for the graduation requirements that apply to their class as an entering 9th-grader regardless of whether the student graduates early or takes more than four years to graduate.

OREGON UNIVERSITY SYSTEM REQUIREMENTS

SUBJECT REQUIREMENTS

English	4 credits
Mathematics	3 credits (Algebra I, Geometry, and Algebra II)
Science	3 credits
Social Science	3 credits
Second Language	2 credits of the same language

All courses must be completed with a grade of C or higher, (a PASS is considered a C). Other college prep electives are recommended to round out the high school program.

Freshman Admissions Requirements For Oregon Universities

(For more freshman admission information go to the websites of individual schools)

	U of O	OSU	PSU	EOU	OIT	SOU	WOU
GPA	3.0	3.0	2.5	2.75	2.5	2.5	3.0
SAT or ACT	Optional	Optional	Optional	Optional	Optional	Optional	Optional
Application Deadlines	Early 11/1/22 Regular 1/15/23	Early 11/1/22 Regular 2/1/23	Regular 8/1/23	Regular 9/18/23	Regular 9/6/23	Priority 2/1/2023 Rolling Admission until 9/6/23	Priority 1/15/2023 Scholarship Deadline 3/1/2023

Community College Requirements

Oregon community colleges have an open-door admission policy. Students can complete a certificate program, a 2-year associate degree program, or transfer to a 4-year college/university. Placement testing at community colleges is required before any courses will be scheduled.

Private Colleges and Universities

Students may want to consider private colleges and universities. These institutions have their own entrance requirements. Consult your counselor and research the requirements online at individual school sites.

COLLEGE CREDIT at Lowell Jr./Sr. High

There are several ways for Lowell students to earn college credits while still in high school. These opportunities for advanced education provide high school students with the preparation and rigor of college-level courses, career and vocational training, and possible college credit or waivers of college courses.

College Now and Career Tech

College Now Credit transcribed at Lane Community College:

College Now (CN) is an LCC program through which students can earn transferable college credit while in high school. Students who successfully complete instruction in approved CN courses will earn college credit in addition to the credit they earn toward graduation. **Earning CN credit is free.** Many credits transfer to other colleges and strengthen student applications for college admissions and scholarships.

There are two types of College Now credit:

- *Career Technical courses:* They eliminate duplication of learning and shorten the time students would be enrolled in LCC programs. They provide guidance for students interested in professional technical areas.
- *Lower-division academic transfer courses:* Most of these credits transfer to other colleges and universities.

Types of College Now Courses at Lowell Jr./Sr. High School:

English/Language Arts Career and Technical Classes Science

DEVELOP CAREER SKILLS at Lowell Jr./Sr. High

Career Development: Student Run Enterprises

The focus of these programs is to allow students the opportunity to apply learning and experience coursework that relates to work and careers.

Health Occupations

A number of classes are articulated with LCC in the Health Occupations field. Currently Anatomy and Physiology, Medical Terminology, and Health Occupations are offered for College Now and career development.

Lowell Construction

Lowell students and staff complete projects at district-owned rental houses and learn construction, home repair, and home improvement skills. Students also learn property management skills.

NEXUS

Students learn a variety of skills in greenhouse management and plant sales. Additionally students complete student-based entrepreneurship programs related to fundraising in woodworking and food processing.

The School to Career Experience

Work-Based Opportunities

- **Meet and Greet:** Presentations given by members of the local business community will be held periodically in the College and Career Center located in the school library.
- **Cooperative Work Experience:** Elective credit positions within the district such as office assistant, cafeteria assistant, and library assistant.
- **Students Mentoring Students:** Students earn credit working as teacher assistants at Lundy elementary, Lowell Jr./Sr. High School.
- **Opportunity Knocks** Listing of local volunteer and work opportunities for high school students.
- **Work Experience Credit:** High school credit earned through working in the community.

The Lowell Jr./Sr. High School College and Career Center

The College and Career Center will offer students support in planning for the future throughout high school. The center will provide a wide variety of services for students including:

Resume writing
Internship and Job Shadow referral
LCC, College Now, RTEC, Duck Link courses
College Research and Exploration
College visitations
ASPIRE Mentors
Career Readiness Certificate

Job search
LCC placement testing
Information on the armed services
Career Exploration and Assessments
Scholarship and financial aid information
FAFSA Completion
Senior Project Mentor Assistance

Career Pathways at Lowell High School Overview

Choosing a career pathway is an important way to help clarify your goals, provide you with a relevant selection of elective courses, and prepare you to succeed in post-secondary education and/or careers. By selecting a pathway, you strengthen the opportunity to gain the qualities and skills that are vital for employment and productivity in business, industry and the community.

The career pathways available in Lowell School District are:

- Natural Resource Systems
- Arts and Humanities
- Health Occupations
- Engineering Systems

NATURAL RESOURCE SYSTEMS



The Natural Resource Systems career learning area relates to the environment and natural resources such as:

- Agriculture (including food systems)
- Earth Sciences
- Environmental Sciences
- Fisheries Management
- Forestry
- Horticulture
- Water Resources
- Wildlife Management
- Urban Environmental Management

The objectives in this career learning area blend the long-term needs of people and environmental values so the land will support diverse, productive and sustainable processes and products.
--Oregon Department of Education

Lowell Course Offerings:

- Physical Science
- Earth Science
- Biology
- Advanced Biology
- Technical Writing

ARTS AND HUMANITIES



The Arts career learning area includes a wide range of career clusters that involve the creation or transmissions of information through the manipulation of a symbolic language. There is an emphasis on process and the concepts of creativity, integrity and aesthetic awareness. A product is usually associated with that process, but it is the process that retains primary importance.

--Oregon Department of Education

Lowell Course Offerings:

- Art
- Band
- Choir

HEALTH OCCUPATIONS

The Health Occupations career learning area orients students to careers that promote health, wellness and diagnoses as well as treatment of injuries and diseases. Some of the careers involve working directly with people while others involve research or the collection and formatting of data and information. Work locations may be varied and may be in hospitals, medical or dental offices, laboratories, cruise ships, medevac units, sports areas, space centers, or within the community.

--Oregon Department of Education



Lowell Course Offerings:

- Health
- Biology
- Anatomy Physiology
- Medical Terminology

ENGINEERING SYSTEMS



The Engineering Systems career learning area relates to the technologies used to design, develop, install, operate, maintain, and upgrade physical systems. These include:

- Engineering and Related Design Technologies
- Mechanical Systems
- Manufacturing Technologies
- Precision Production
- Construction
- Electrical Systems
- Electronics
- Information Technology

People in this career area use academic and technical knowledge and skills to design, build, inspect, deliver, maintain, and repair aircraft, automobiles, buildings, computer equipment, roads, bridges, and manufacturing machinery.

Lowell Course Offerings:

- Algebra I
- Algebra II
- Geometry
- Pre-Calculus
- Woodshop
- Construction
- Individual Projects
- Technical Writing

ACADEMIC RECOGNITION

Students who demonstrate excellence through their high school careers are eligible for a variety of academic awards and special recognition. All students should strive to achieve the academic excellence that these awards celebrate.

National Honor Society

National Honor Society recognizes and encourages academic achievement while developing other characteristics essential to citizens in a democracy. LHS members are selected based on leadership, scholarship, service, and character. Specific requirements include:

- Successful service in at least two leadership roles at Lowell.
- Cumulative 3.5 GPA, and have sophomore standing.
- Successful completion of rigorous courses.
- Completion of at least 25 hours of service to others.
- Demonstrates the following six qualities: respect, responsibility, trustworthiness, fairness, caring, and citizenship.



School Recognitions

Honor Roll, Perfect Attendance, and demonstration of the ideals of Learn, Honor, and Succeed recognitions are some of the distinctions of merit awarded to students.

The Bridge Students of the Month are selected each month. Staff choose students who have demonstrated success in academics and athletics are chosen for the honor.

Scholar Athletes

Scholar Athletes are seniors who earn a 3.5 or better grade point average and earned a varsity letter in at least one OSAA-sanctioned sport.

Community Service Cords

While students are required to earn 50 Community Service Hours for graduation, students earning 100 or more hours of community service will receive a special cord at graduation for that accomplishment.

Honor Blanket

Honor blankets are awarded to a student who demonstrates excellence in academics, athletics, leadership and community service.

APPLIED & FINE ARTS

MUSIC



INSTRUMENTAL MUSIC

CONCERT BAND

Grade Level: 9-12

Type of Credit: 1 credit / year: Applied Fine Arts or Elective

Teacher Consent Required

Description:

This is the most advanced ensemble in our program, reserved for students with previous experience and a desire to play in a traditional band setting at the very highest levels. Training will focus on the reinforcement of basic instrumental techniques and the exploration of advanced artistic expressions. A wide variety of musical styles will be utilized, with a heavy emphasis on established literature in the concert band tradition. Participation in concerts and festivals is part of each band member's responsibility, and pep band is an occasional requirement (except for athletes in the given sport for which a performance takes place). Perennial goals include participation in spring festivals, OSA-level competitions, and the occasional regional or out-of-state performance tour.

INTERMEDIATE BAND

Grade Level: 7-8

Teacher Consent Required

Description:

This course is for junior high students, ideally having completed a year of beginning-level band and progressing toward the more advanced expectations in concert band. Training will focus on the learning and reinforcement of basic instrumental techniques, including breath support, tone quality, articulation, intonation, phrasing, dynamics, and blend. Students will also be introduced to more advanced concepts in the areas of musicality and artistic expression. A wide variety of musical styles will be utilized, with a heavy emphasis on established literature in the concert band tradition. Participation in concerts and festivals is part of each band member's responsibility.

BEGINNING BAND

Grade Level: 6

Teacher Consent Required

Description:

This course is for students new to concert band instruments and techniques. No previous experience is required, although regular practice is expected during the course of the year. Training will focus on the basics: how to handle and care for an instrument, read basic notation, produce good musical sounds through simple techniques, and participate appropriately within the group ensemble setting. Students will gain a practical understanding of basic musical concepts such as melody, harmony, and rhythm, and be introduced to more advanced concepts like dynamics, articulation, phrasing, and balance. Participation in local concerts is part of each band member's responsibility. Ideally, this class should prepare all students to progress to the Intermediate Band level.

VOCAL MUSIC



CONCERT CHOIR

Grade Level: 9-12

Type of Credit: 1 credit / year: Applied Fine Arts or Elective

Teacher Consent Required

Description:

This is the most advanced vocal group in our program, reserved for students with a desire to perform choral music at the highest level. No previous experience is required, but is highly beneficial. Each new student goes through a low-pressure assessment to establish their vocal acumen, and is expected to show a consistent, positive contribution to the ensemble's performance. Training will focus on basic principles of vocal production and choral techniques (including breath support, tone quality, diction, phrasing, harmonies, dynamics, and blend) along with more advanced concepts in the area of artistic expression. A wide variety of musical repertoire will be utilized, with an emphasis on well-established, high-level choral literature. Participation in concerts and festivals is part of each choir member's responsibility, as well as the occasional singing of the national anthem at athletic events. Perennial goals include participation in spring festivals, OSAA-level competitions, and the occasional regional or out-of-state performance tour.

JUNIOR CHOIR

Grade Level: 7-8

Teacher Consent Required

Description:

This course is for junior high students with an interest in singing in a collaborative, group setting. No experience is required, but each new student will go through a low-pressure assessment to establish his or her vocal acumen. Students are expected to show a consistent, positive contribution to the ensemble's performance at all times. Training will focus on basic principles of vocal production and choral techniques (including breath support, tone quality, diction, phrasing, harmonies, dynamics, and blend) along with more advanced concepts in the area of artistic expression. A wide variety of musical repertoire will be utilized, with an emphasis on well-established, junior high-level choral literature. Participation in concerts and festivals is part of each choir member's responsibility.



ART, CAREER AND TECHNICAL EDUCATION

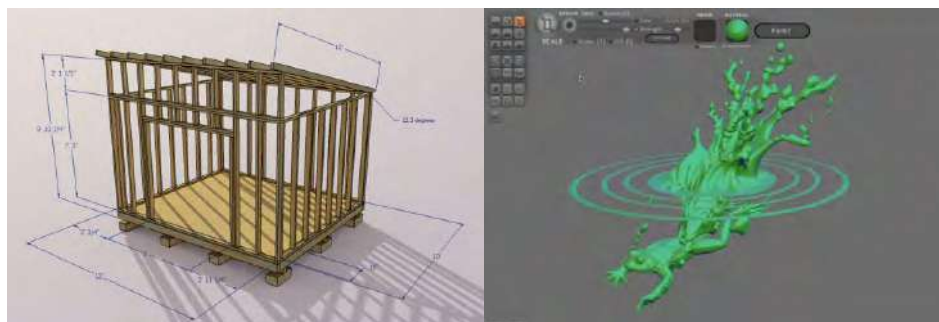
Art and Design

Grade Level: 9-12

Type of Credit: 1 credit / year: Applied Fine Arts or Elective

Description:

This class is designed to provide an overview of the visual arts while giving students the skills to become a better artist. A major focus is developing students' drawing and perception skills, with an emphasis on studio production. Traditional art techniques like drawing and printmaking will be explored in addition to newer technologies using a laser engraver, 3-D printer and vinyl cutter. Drawing focuses on black and white or monochromatic rendering from life, photographs, and the students' imaginations. This course is designed to develop higher-level thinking, art-related technology skills, art criticism, and aesthetics. If you are a student who wants to improve your ability to draw or experiment in the latest art/design tools you can come explore new ways to express yourself. From beginner to experienced artist, this class will challenge you. The class can be repeated with all new assignments or focusing on personal areas of interest.



Building Construction and Remodel

Grade Level: 9-12

Type of Credit: 1 credit/ year: Applied Fine Arts or Elective

Description:

This class is a hands-on building and renovation opportunity. The curriculum will focus on various aspects of the building trades; these will include shop/construction site safety guidelines and awareness, reinforcement of math skills by the incorporation of practical application within construction, plumbing, masonry, and electrical. We will practice reading, preparing, and interpreting construction blueprints along with local building codes. Students will work on the proper identification of construction materials and their appropriate application. The focus of the course will alternate between our construction curriculum and district, student/family, and community projects. Project selection will be made by evaluating its ability to reinforce the curriculum and broaden student knowledge and experiences. Projects will vary from semester to semester.

4 College Now Credits

This course is designed for the student who wants to build on the skills obtained in the introductory woodworking course and develop advance techniques in woodworking and design. We will investigate woodworking and construction careers in addition to exploring college and university options in engineering and design. Students will explore the basics of cabinetwork and furniture design through a series of activities that will result in advanced-level products. Areas that will be covered include product/furniture design, aspects of cabinetwork and casework, assembly, finishing, lumber/material specifications and selection, cost estimation, and the use of technology in product creation. CNC machining and Laser Engraving not only allow student prototyping opportunities but exposure to multiple unit production runs. The goal of the class is to expose students to techniques and options available to them within the wood/furniture and product design fields.



Possible college now credit



Computer scientists play a central role in our technological infrastructure. They develop hardware, software and other applications for use by the military, businesses and average consumers. This has made computer science one of the fastest-growing career fields in the U.S. today. Computer science related careers are also some of the highest paying. This course is also useful for students that are not looking into a computer

science related career. 7.7 million Americans say they use computers in a complex way at their job. Many of these jobs are not STEM related! This course explores the discipline and profession of computer science. It provides an overview of computer hardware architecture, the study of algorithms, software design and development, data representation and organization, ethics and the history of computing and its influences on society. The student is exposed to both low-level and high-level programming languages.

Introductory Woodworking Explorations

Grade: 7-8: (non-credit)

Description:

Introductory woodworking is an overview into the field of wood technology. This is an excellent foundation course for a career in woodworking or construction or just a class to make fun projects. It is designed to instruct students in the areas of reading and developing project drawings, calculating the costs of materials, math application within the building trades, joinery, project procedures, and safety. A major emphasis will be placed on shop safety with both hand and power tools. The goal of this course is to help students navigate their way from the beginning stages of design to the final task of constructing woodworking projects. Students will begin by constructing several teacher-assigned projects as well as the opportunity to create, design, and build personal projects of their choice with teacher guidance and close supervision.



Careers

Senior Careers

Grade Level: 12 (Required)

Type of Credit: .5 credit/ semester: Careers or Elective

Description:

This course is a required senior class needed for graduation. This class utilizes CIS Oregon to explore career interests, along with the ASPIRE program. ASPIRE is Oregon's mentoring program to help students access education and training beyond high school. The focus is an in-depth exploration of their career/education plans following high school. The class concentrates on accomplishing two major goals. First,

to help each student research then apply for college, technical school, or an apprenticeship program following high school. Second, to assist students in the planning, execution, and presentation of their senior project. The Lowell High School senior project is the districts culminating project fulfilling the state required graduation requirement.



HEALTH & PHYSICAL EDUCATION (PE)

Health and physical education is a vital component for the development of a student's physical, mental, and social well-being. It is our mission to provide an equal opportunity to our students through planned activities, for physical development in the areas of strength, flexibility, cardiovascular, and coordination. Our program will allow students the opportunity to develop individual skills and introduce new, enjoyable experiences for lifelong health, physical fitness, leisure, and overall physical well-being.

PHYSICAL EDUCATION

Junior High Physical Education

Grade Level: 7-8

Description:

Students will be involved in a variety of activities. Some of these activities will include scooter games, throwing and catching, tag games, tumbling, track and field, and badminton. Students will also participate in team sports including soccer, volleyball, basketball, softball, and team handball. Students will be tested from the "Fitness Gram". Students will have short weight room activities designed to improve full range of motion movements, utilizing lightweights and correct form.

General Physical Education

Grades 9-12

Credit: .5 credit/ semester: PE or Elective

Description:

Physical Education will allow students to develop physically through fundamental movement and stretching. Students will develop personally through running, stretching, and weightlifting. Both team and individual sports and activities will be utilized to help kids get where they should be physically. Some of the team units include soccer, volleyball, softball, and handball. Some of the individual units include badminton, weights, track and field, and tumbling. These activities will provide the opportunity for students to meet state and national Physical Education standards. The best PE goal there is, is to have fun while sweating hard!

Strength and Conditioning

Grades 9-12

Credit: .5 credit/ semester: PE or Elective

Description:

This Physical Education course will focus on personal fitness. There will be an emphasis on cardiovascular conditioning and weight training. Students will run and move consistently. Sweat is the best indication of how well a person is doing that day. Sprinting and distance running will be common activities, as well as extended time in the weight room.

HEALTH

Health:

Grades 10

Credit: .5 credit/ semester: Health or Elective

***This course is required for all 10th**

Description:

Students will study multiple aspects of personal and social health. Units include nutrition, body systems, drug/alcohol/tobacco/vape safety, disease prevention, and safer sex with an emphasis on abstinence. Students will explore the holistic view of health and learn how to assess their own level of wellness. Students will gain a better understanding of domestic violence, teen dating issues, and bullying and harassment. Students will learn decision-making skills needed to live a healthy life.

MEDICAL TERMINOLOGY

Grade 11-12

Credit: .5 credit/semester: CTE or Elective

3 college credits available through College Now

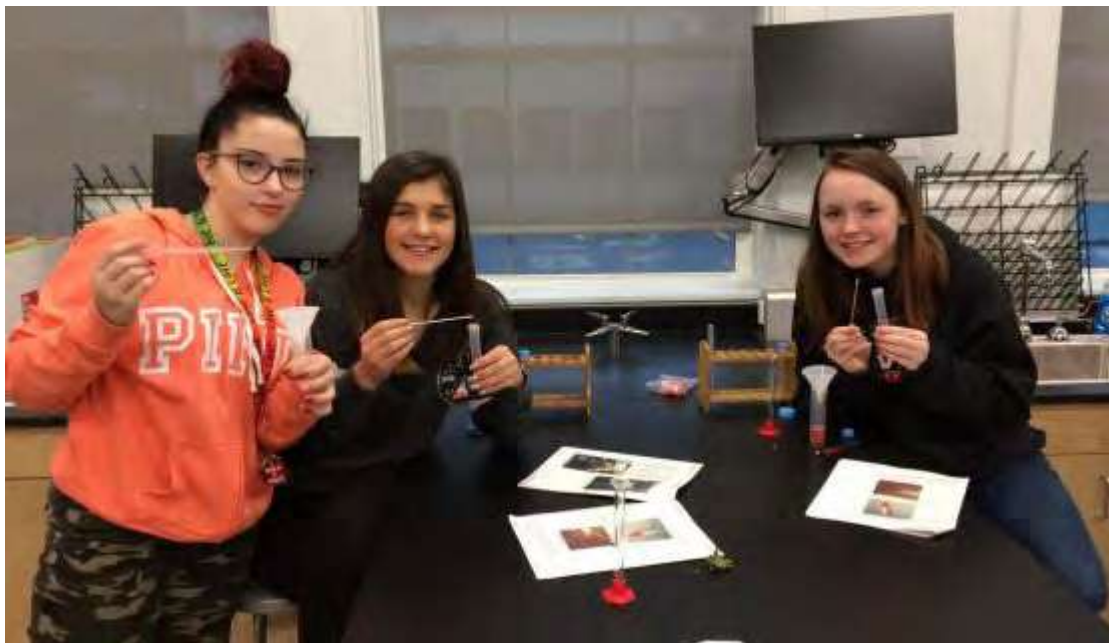
Medical terminology is the study of the principles of medical word building to help the student develop the extensive medical vocabulary used in health care occupations. Students receive a thorough grounding in basic medical terminology through a study of root words, prefixes and suffixes. The study focuses on correct pronunciation, spelling, and use of medical terms. Anatomy, physiology, and pathology of disease are discussed. No previous knowledge of these topics is necessary.

HEALTH OCCUPATIONS

Grade 11-12

Credit: .5 credit/semester: CTE or Elective

This course will take a hands-on approach to learning what it is like to work in the medical field. Students will learn the skills necessary to assist in the front office, take incoming triage data, manage patient files, and much more. Completion of this course will help ensure that students are prepared to make a smooth transition into the world of medicine.



LANGUAGE ARTS

The Language Arts curriculum at Lowell for all grades rotates in a two-year cycle over 7th and 8th, 9th and 10th, and 11th and 12th grades. Each year focuses on a different theme, which is reflected in the literature and nonfiction, selected over the course of the year.

Language Arts (Junior High)

Grade 7 and 8

The Hero's Journey:

Description:

This year explores literary theme of the Hero's Journey. The first term will focus on the classical or mythological hero. The second term will explore the characteristics of modern literary heroes, during which students will work to create their own definition of heroism for a class presentation. The end of the year will also include a poetry unit.

Up to the Challenge:

Description:

This year the class will focus on texts that portray individuals, especially young people, overcoming challenges and facing their fears. Students will connect novel themes with their own lives through the writing of personal narratives and poetry.

English I and II

Grade 9 and 10

Credit: 1 credit/ year: LA

Coming of age:

Description:

This course will focus on young adult formation of identity, including their relationship to their community, parents, and society. Students will develop their writing skills with an emphasis on logical reasoning and personal connection.

American Identity:

Description:

This course will focus on developing research skills by reading texts centered around the theme of American Identity. We will read texts from a variety of eras and cultures and students will synthesize their knowledge into a variety of written forms.

English III and English IV

Grade 11 and 12

Credit: 1 credit (Year-long Class): LA

College Credit Available through the AP Exam

Summer Reading Assignment Required

English III

Semester 1 - Advanced Fiction - Transgression and Redemption

This course focuses on fiction, drama, and poetry. Students will cultivate a personal and aesthetic appreciation for literature as they learn to interpret, analyze, and evaluate it. Societal and personal redemption will be the focus. Students will respond to literature through journals and art, as well as practice formal literary analyses, in-class essays, and Socratic discussion.

Semester 2 - Rhetorical Awareness Analysis

This AP / Prep course will focus on nonfiction from various historical eras and countries when certain arguments have served as catalysts for societal change. Students will learn and analyze the rhetorical strategies of famous speakers and writers throughout history and will practice constructing their own arguments.

English IV

Semester 1 - Adv. Literary Analysis - Writing as art and truth

Students will study memoirs, speeches, poetry, and other texts of notable artistic merit to explore how artistry is used in non-fiction and allegory. Students will also begin to explore writing as a multi-modal tool in order to evaluate how writing has been used to affect social discourse.

Independent Study Technical Writing I & II

Grade 11-12

Credit: .5 credit/semester: LA

Independent Study Technical Writing class exposes students to the practical writing that is done in the workplace. The course requires that students meet with the teacher, at least, once a week. Some of the areas covered are comma placement, major errors and sentence structure, paragraphing, formatting, memos and writing various types of documents. Students are offered an opportunity to better their writing through revision. This class may also be used for credit recovery.



MATHEMATICS

Integrated Math 7 Grade 7

Seventh Grade Mathematics is a one-year course designed to provide students with a hands-on approach to mathematical concepts. The emphasis is on learning new math concepts while connecting these ideas to prior understandings. When complete with the course, students will understand how to use rational numbers, equations, proportions, probability, and geometry to solve real-world problems.

Pre-Algebra Grade 8

Eighth Grade Mathematics is a one-year course where students get to understand challenging math concepts. The course starts with students getting a deep understanding of situations that involve a constant rate of change. They learn that this can be represented as a situation, table, graph, or equation. This concept is key to future courses and very relevant to everyday life since these situations are so common. In 8th grade, students also gain a deeper understanding of geometry. The emphasis in

geometry is around angle relationships in triangles as well as the relationship between the sides of a right triangle. Finally, we will touch on some high-school level algebra by learning about functions.

Algebra I

Grades 9-12

Credit: 1 credit/ year: MA

Description:

Students will deepen their understanding of mathematics through a problem-based approach with an emphasis on connections between topics in mathematics. Students will develop powerful mathematical tools and learn new ways of thinking about and investigating situations. The content of the course will emphasize an understanding of functions with a deep understanding of linear and exponential functions. Additional topics include systems of equations, sequences, inequalities, transformations, and congruence and coordinate geometry.

Geometry

Grades 9-12

Credit: 1 credit/ year: MA

Description:

Students will explore and understand the many relationships that exist within and between shapes. By investigating situations, they will develop their own deep understanding of connections within mathematics. During this course, students will also further their understanding of algebra to prepare them for Algebra II. A strong emphasis in this course is to understand properties of polygons and circles. These properties include perimeter, area, volume, angle relationships, and trigonometric relationships. Students will be introduced to solving quadratic functions and deepen their understanding of functions. A portion of the course is dedicated to using models to represent probability.

Algebra II

Grades 9-12

Credit: 1 credit/ year: MA

Possible College Now Credit

Description:

Students deepen their understanding of functions and greatly increase the types of situations they can explain through mathematics. They will be able to model complex situations in several forms, including graphs, equations, and tables. This course is taught using a problem-based approach so students can understand mathematical

concepts through a context. Topics include transforming graphs to deepen understanding of how variables and constants affect the range, use systems of equations to solve problems, investigate logarithmic and exponential functions, and find complex roots of polynomials.

Math 111/College Algebra (Online)

Grades 9-12

Pre-requisite: Algebra II or placement by the College's Math Placement Process.

Credit: .5 credit/**semester:** MA

5 college credits available through Lane Community College

Description:

College Algebra is the study of basic functions and their applications. This includes polynomial, rational, exponential, and logarithmic functions and their inverses. Other topics include an introduction to sequences and non-linear systems of equations. In accordance with national recommendations, this course emphasizes skill building, problem solving, modeling, reasoning, communication, connections with other disciplines, and the appropriate use of technology.

Math 112/Trigonometry (Online)

Grades: 9-12

Prerequisite: MTH 111-College Algebra completed with a grade of "C-" or better within the past two years or placement by the College's Math Placement Process.

Credit: .5 credit/**semester:** MA

5 college credits available through Lane Community College

Description:

Trigonometry has wide applications in the world around us. It is a vital tool in construction, physics, and engineering. Trigonometry is preparatory for Calculus 1 (Differential Calculus, MTH 251). The major topics covered include radian measure, circular functions and their graphs, right triangle ratios and related trigonometric functions, identities, solving trigonometric equations, law of sines, law of cosines, and applications. Other topics include polar coordinates, parametric equations, vectors, and conic sections. Some background in geometry is strongly recommended.

Math Peer Tutor/Mentor

Grade 10-12

Pre-requisite: Enrollment in or Completion of Advanced Algebra & Dept. Approval

Type of Credit: 1 credit/**year:** Elective

Description:

Each student enrolled will tutor students needing additional assistance with math. Each tutor will be under the direct supervision of a math teacher and will be required to complete an initial training program. Requirements include one assigned period of peer

tutoring each day in the Math Center. The responsibilities of the peer tutors include assisting students with homework, make-up work, computer related activities, and math standards.



ADDITIONAL ELECTIVES

Teacher Aide

1 Credit/ year: Elective

Prerequisite: Teacher Approval

Description:

Students may earn elective credit as a teacher assistant. Teacher assistant positions are available in selected instructional departments. Students planning to be teacher assistants must receive departmental approval and meet certain prerequisites. A good attendance record is required.

Office Aide

1 Credit/ year: Elective

Prerequisite: Secretary Approval

Description:

Main Office student assistant duties consist of answering a multi-line telephone, and taking messages for administrators, teachers, and staff. Other tasks include delivering messages to classrooms, filing, and assisting other departments when necessary.

Library Aide

1 Credit/ year: Elective

Prerequisite: Librarian Approval; Strong Basic Academic Skills

Description:

Students who are library assistants learn practical library skills through on-the-job training in the school library. Providing quality services to students and staff, developing career skills such as responsibility and teamwork, and performing a variety of clerical tasks such as shelving books and keeping the facility in order are just a few of the jobs a library assistant will perform. In addition, students will become familiar with the computerized resources in the library so they can peer-tutor patrons needing help as well as being able to troubleshoot basic computer issues. Students need to be able to work independently and have a self-motivated work style.

Cafeteria Aide

1 Credit/ year: Elective

Prerequisite: Food Service Worker Approval

Description:

Students will assist in food preparation and food service. Students should have an interest in nutrition, culinary arts, and food preparation. A Food Handler's Card will be needed for advanced food preparation.

Work Experience

Prerequisites:

- **Student must be enrolled in a minimum of two academic courses at Lowell High School.**
- **Administrator Approval.**
- **Currently employed and working a minimum of 10 hours per week.**

Description:

This course has been designed to give high school students a chance to earn elective credit for work in the local community. The curriculum is a self-study course with quarter assignments relating to the student's career interests and workplace readiness skills. In addition to the quarter assignments, the student must provide the original or a photocopy of each paycheck stub documenting hours worked, and have their employer complete an evaluation every quarter. **Maximum of 2.0 credits can be applied to graduation requirements.**

SCIENCE

Note: The junior high science curriculum, which includes Integrated Science – Life Science and Integrated Science – Earth Science/Physical Science, is a two-year cycle. All junior high students are in combined classes for science. There are two sections offered, but each class is a combination of 7th and 8th grade students. Students will take one of the classes their 7th grade year and the next one their 8th grade year. The order in which the classes are taken does not affect future high school level science courses.

JR. High Integrated Science – Life Science Grade 7-8

This introductory science course focuses on the core science concepts found in life science. Do you enjoy learning about plants and all animals, even those without backbones? If you answered yes, then this is the class for you! In addition to living things you will also learn about genetics, DNA, biochemistry, photosynthesis, and much more.

JR. High Integrated Science – Earth Science Grade 7-8

Do you ever wonder about the sky above your head and the ground below your feet? This is the course for you! Integrated Science offers an in-depth look at the planet we call home. We start out at the outer reaches of space exploring nebula, black holes, and stars. As the year moves on, we zoom in closer to our own planet allowing us to take a deep look into the earth and the processes that have created it such as erosion, deposition, glaciation and much more. On the way, you will learn some of the basics of physical science and earth science.



Earth Science

Grade 9-11

Credit: 1 credit/ year: SC

This course takes an in depth look at the physical formations of the earth. How did the earth form? What helped shape it into the planet it is today? What resources are available today but might not be in the future? You will learn the answers to those questions and many more as we also look at the physics that occurs behind the scenes on this amazing sphere that we call home! This course is accomplished through reading, inquiry/experimentation, written work, laboratories and other media. Topics include kinetic-molecular theory, atomic structure, elements and the Periodic Table, properties and changes in matter, force, mechanics, motion, waves and energy, electricity, sound, light, magnetism, seismic activity, plate tectonics, geology, and the solar system.

Biology

Grade 9-11

Credit: 1 credit/ year: SC

12 college credits available through College Now

Description:

Biology, the study of life, is a yearlong look at the living world. This course will look at the classification of organisms, cell structure and function, the evolution and diversification of organisms, ecosystems and their interactions, and the influence of humankind on ecosystems. After this course, you will never look at the world around you the same again.

Physics

Grade 9-12

Credit: .5 credit/semester: SC

Do you often wonder how things work? If so, Physics is the perfect course for you. The following major physics topics will be covered: mechanics, electricity & magnetism and wave motion. This course includes interactions of matter and energy, velocity, accelerations, force, energy, momentum and electric charge. Students will be challenged to apply their knowledge of the laws of physics to solve critical thinking problems related to physics and engineering. An emphasis is placed on a mathematical understanding of the physics principles that are presented.

Anatomy & Physiology

Grade 11-12

Credit: 1 credit/year: Science

Program: Science/CTE Health Science

6 college credits available through College Now

Description:

Take a closer look at the human body with this course. Anatomy and Physiology is a study of the structures and functions of living systems with primary emphasis on humans. It is a course designed for students interested in the field of medicine, dentistry, nursing, health, nutrition, and teaching. This upper level course will focus on the systems of the human body, histology, fundamental concepts of physiology, and related terminology.

**Biochemistry & Independent Projects**

Grade 11-12

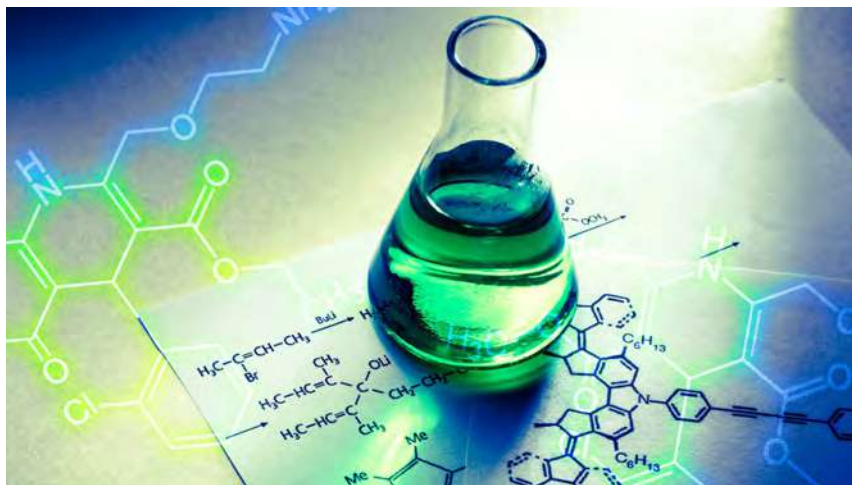
Credit: .50 credit/ semester SC

Biochemistry explores the structure and role of essential biological molecules focusing on carbohydrate, lipid, nucleic acid and protein chemistry. Biochemistry is a survey course designed to review general principles of chemistry and biochemistry while relating them back to the physiological conditions of an organism, understanding the chemical and molecular events involved in biological processes. Topics designed in this course include the structure and function of biomolecules, relationship of biochemistry to the physiology of an organism, relationship of bioenergetics to the physiological state of an organism, description of the chemistry underlying metabolic reactions, regulation of metabolic pathways, nutrition and metabolism, enzyme structure and catalysis, DNA, RNA and protein synthesis, and the role of DNA in inheritance. This course provides the linkage between the inanimate world of chemistry and the living world of biology. The second portion of this class is set up for in-depth exploration of a topic and/or problem of a student is choosing. The goal is for students to identify a topic of study, design a testable experiment, complete the experiment, obtain and analyze data, and present their findings during a community meeting/event.

Chemistry

Grade 11-12**Credit:** .5 credit/semester **SC**

This introductory course focuses on understanding the basic principles of general chemistry and their applications. Topics covered include classification of matter, atomic theory, chemical formulas and equations, the periodic table, atomic structure, bonding, rates of reaction, chemical equilibrium, acids and bases, oxidation-reduction, organic, nuclear and environmental chemistry.



SOCIAL STUDIES

Junior High Social Studies: Early U.S. Studies**Grade 7-8**

This required class explores the foundations of our country. This yearlong course examines pre-European contact to the end of the Civil War. This period of U.S. History is an essential framework for our present day society, and comparisons to the present day will occur throughout the course. Geography and economics will work in conjunction to evaluate the establishment of our capitalistic system, which will become vital when studying later US and World History. Finally, the class will delve into the American form of government, the enlightened principles it is based on, and the privileges American's enjoy and work to protect. (Note: This Curriculum is on a looping cycle and will be taught to 7th and 8th grade in the 2020-2021 school year).

Junior High Social Studies: Eastern World Geography**Grade 7-8**

As a required class for 7th and 8th-grade students at Lowell Jr. High school this year long social studies course concentrates on the challenges and achievements of people

in the world before the late modern period; This will include, but is not limited to, Egypt, China, Greece, Rome, Africa, Early Religions, Mediterranean Asia, Medieval Europe and the Renaissance. Eastern World Geography provide a meaningful look at a variety of perspectives born through the context of geography, economics, and government. These alternative ways of viewing the world can increase an understanding of the world as a community as a whole and our understanding of our own country. (Note: This Curriculum is on a looping cycle and will be taught to 7th and 8th grade in the 2021-2022 school year).



World History

Grade 9-10

Credit: 1 credit/ year: SS

Description:

This yearlong course is a required social studies class for all high school 9th and 10th grade students at Lowell High School. The class will study the world's cultures and their respective locales and histories. By assuming a greater understanding of the complexities of the human experience combined with challenges of a culture's unique physical geography, students will gain a greater appreciation of the world's people, their past, present and future. (Note: This curriculum is on a looping cycle and will be taught to 9th and 10th grade in the 2020-2021 school year.)

US History

Grade 9-10

Credit: 1 credit/ year: SS

Description:

This is a required yearlong social studies class for all 9th and 10th grade students at Lowell High School. This class examines America's history from the Reconstruction to the present. We will explore the circumstances that took our country from the painful

experience of our country's most catastrophic war through the challenges and accomplishments of the 20th and 21st centuries. By doing so, students will gain a greater understanding and appreciation of the American experience as well as view events from a critical lens.

Government

Grade 12

Credit: .5 credit/ semester: SS

Description:

This required class for Lowell High School seniors will give students a greater understanding and appreciation of our unique federal system of government. Armed with a better perspective of the nuances of government, students will become more active and educated participants in our political system.

Economics/Personal Finance

Grade 12

Credit: .5 credit/ semester: SS

Description:

This half-year required class for Lowell High School seniors will emphasize personal finance, but not at the expense of basic economic principles. The intent is for students to understand the need to make sound economic decisions for life as the quality of one's life is very often predicated on one's fiscal selections.



WORLD LANGUAGES

Spanish I

Grade 9-12

Credit: 1 credit/ year: Applied Fine Arts

Prerequisites: Teacher and Administrator Approval

Description:

This course offers basic Spanish grammar, stressing comprehension, conversation, reading, and writing. Emphasis is placed on cultural aspects of the many Spanish-speaking countries.

Spanish II

Grade 10-12

Credit: 1 credit/ year: Applied Fine Arts

Prerequisites: Spanish I (C or better) or Teacher and Administrator Approval

Description:

This course reviews and advances the Spanish 1 program. Intensive oral and written exercises are designed to help the student acquire a more accurate use of Spanish. It is recommended that Spanish 2 be taken the term immediately following Spanish 1

SUPPORT SERVICES

Language Arts Lab

Grade 7-12

Type of Credit: .5 credit / semester: Elective or English (with approval)

Prerequisites: Teacher Approval Needed

Description:

Language Arts Lab supports students' reading and writing skills. Students are assessed for their current skill level in reading and then placed at an appropriate level within the Read Naturally Live online curriculum. Students are able to choose from a variety of reading passages, learning about a vast array of topics connecting to academic subjects such as Physical Science and U.S. History. Lessons include

vocabulary building activities, making predictions, repeated practice, reading along, answering quiz questions in a variety of forms, and summarizing the passage. The teacher supports the students at multiple points along the way, monitors the entire process, and makes changes as appropriate, to fit the students' needs.

Resource Study Hall

Grade 7-12

No Credit

Prerequisites: Teacher Approval Needed

Description:

Resource Study Hall is a structured study hall that allows students direct support from a teacher, within a quiet focused environment. Students are expected to make the most of their time, prioritizing effectively to maximize their success as a student. Students prioritize assignments to work on based on class assignments and due dates. If all assignments are completed, students are expected to work on their essential skills, such as math, reading, and writing, in order to work towards successful completion of essential skills tests needed for High School graduation.



Resource JH Math

Grade 7-8

Course Prerequisites: Teacher Approval Needed

Description:

Resource Junior High Math is a course that is designed to fit the individual math needs of the 7th and 8th grade students within it. Students will work towards grade level Common Core Standards, while reviewing and filling in learning gaps from previous years, as needed. Students will work within a small group, minimizing distractions and maximizing the level of support available from the teacher. Depending on student needs, curriculum may come from authorized textbooks or online sources and programs. Data will be taken on a continuous basis to inform any changes in instruction and maximize student success and skill growth.

Resource JH English

Grade 7-8

Course Prerequisites: Teacher Approval Needed

Description:

Resource Junior High English is a course that is designed to fit the individual reading and writing needs of the 7th and 8th grade students within it. Students will work towards grade level Common Core Standards, while continuing to review and practice basic skills, as needed. Over the course of the year, students will read and write in a variety of forms, including expository/informative, narrative, and persuasive. Students will work within a small group, minimizing distractions and maximizing the level of support available from the teacher. Depending on student needs, curriculum may come from authorized textbooks or online sources and programs. Data will be taken regularly to inform any changes in instruction and maximize student success and skill growth.

Algebra Topics/Resource HS Math

Grade 9-12

Type of Credit: .5 credit / semester: Math or Elective

Prerequisites: Teacher Approval Needed

Description:

Resource High School Math is a course primarily focused on developing Algebra level skills. It is designed to fit the individual math needs of the 9th – 12th grade students within it. Students will work towards grade level Common Core Standards, while reviewing and filling in learning gaps from previous years. Students will work within small groups to maximize the level of support available from the teacher. Depending on student needs, curriculum may come from authorized textbooks or online sources and programs. Data will be taken on a continuous basis to inform any changes in instruction and maximize student success and skill growth.

Resource HS English

Grade 9-12

Credit Offered: .5 credit / semester: LA or Elective

Prerequisites: Teacher Approval Needed

Description:

Resource High School English is a course that is designed to fit the individual reading and writing needs of the 9th – 12th grade students within it. Students will work towards grade level Common Core Standards, while continuing to review and practice basic skills, as needed. Over the course of the year, students will read and write in a variety of forms, including expository/informative, narrative, and persuasive. Students will work within a small group, maximizing the level of support available from the teacher. Depending on student needs, curriculum may come from authorized textbooks or online sources and programs. Data will be taken regularly to inform any changes in instruction and maximize student success and skill growth.

