Lisbon Regional School

PROGRAM OF STUDIES

2025-2026

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MISSION STATEMENT

Lisbon Regional School's mission is to prepare students to become lifelong learners who respect themselves and others, work cooperatively as well as independently, reason at complex levels, communicate effectively, contribute to their community and the democratic process, and appreciate the changing world's aesthetic and cultural diversity. Inherent in this education program is the concern for the intellectual, physical, social, and emotional well-being of every student.

INTRODUCTION

This booklet has been prepared to provide information to both students and parents. Lisbon Regional High School has continuously upgraded its course offerings as new and accepted programs are developed locally, state, and nationally. Because of this, programs are subject to change.

Students' course selections are approved by their parents, the school counselor, and the principal. In addition to the graduation requirements, various elective courses are available. Teacher assignments are based upon these selections, state requirements, and professional certification. Course selections require careful study, and the guidance office is available to assist in this crucial task.

The State of New Hampshire and the local School Board require that specific courses be passed to qualify for a diploma. The guidance office will provide information to students and parents concerning the various requirements for all post-secondary programs of study. Students and parents are encouraged to discuss this program of studies with the school counselor individually.

IMPORTANT NOTICE

The Lisbon Regional School District, Lisbon, New Hampshire, hereby notifies all applicants for admission and employment, all students and employees, all employee organizations or unions, and all referral agencies that the Lisbon Regional School District does not discriminate on the basis of sex in the educational programs and activities which it operates; and that such discrimination is prohibited by Title II of the Education Amendments of 1972. The Superintendent of SAU #35, Mt. Eustis Commons, 262 Cottage Street, Littleton, New Hampshire 03561, 444-3925, is designated to coordinate the district's efforts in compliance with Title II. This notice is required by Title II of the Education Amendments of 1972 and by section 86.8 of Title II.

SCHOOL COUNSELING MESSAGE

The selection of courses for the next school year is an important task. We encourage students and parents to spend time studying the Program of Studies so they will understand school and state requirements and enhance individual skills and interests. As freshmen and sophomores, there are limited electives, but as students fulfill their requirements, more electives become available.

Long-range planning helps make good choices when selecting courses. We encourage parents and students to consider career paths based on the student's strengths, academic successes, and interests. Planning then helps these dreams become realities. Plans should include post-high school possibilities and ensure that course selections make these choices possible. Lisbon Regional School has worked with Littleton High School and

Profile High School to see how curriculum offerings can be increased to help students obtain a challenging, relevant, and engaging education. Lisbon Regional School is also developing partnerships with local businesses to create work-study programs for students. Please contact the school counselor if you have a request not appearing in our Program of Studies. Investing time and thought into planning your courses will help us meet your needs and give you more choices in the future. High school is an exciting and rewarding time, and we will help you plan to achieve your goals.

GRADUATION REQUIREMENTS

Lisbon Regional School Diploma

To qualify for a Lisbon Regional School diploma, each graduate shall complete at least 27.5 credits selected from the school's Program of Studies. Students also must complete performance-based graduation requirements and pass the citizenship test.

Students must earn the following credits:

Arts Education - .5 credit
English/Language Arts - 4 credits (1 course required each year)
Mathematics - 4 credits (Includes Math 1-3) (1 course required each year)
Science - 3 credits (Physical Science, Biology, Science elective)
Social Studies - 3.5 credits (World History 1 credit; US History 1 credit; US Government/Civics 1 credit; Economics & Personal Finance .5 credit)
Physical Education - 1 credit
Health Education - .5 credit
Occupational Preparation (Career Planning) - .5 credit
World Language - 1 credit
Digital Portfolio & Defense (Information & Computer Technologies) - 1 credit
Speech & Research - 1 credit
Electives - 7.5 credits (Must be selected from the LRS Program of Studies)

TOTAL - 27.5 CREDITS

To pass from one grade to the next, a student must earn the following credits:

6.5 - Credits to enter 10th Grade
13 - Credits to enter 11th Grade
19.5 - Credits to enter 12th Grade

Core Diploma

There may be circumstances where a student is significantly behind in credits and is in jeopardy of not graduating with a standard 27.5 credit Lisbon High School diploma. In this case, at the recommendation of the student's support team, a student may seek a 20-credit diploma with approval from parents/guardians and the principal. To qualify, students must be at least 16 years of age and have a credit deficit. The 20-credit diploma is

not a pathway for early graduation. Students on this plan may have a different schedule and be restricted from certain school activities.

The 20-credit diploma meets the State of New Hampshire's minimum graduation requirements. Students must pass the citizenship test and earn the following credits:

Arts Education - .5 credit
Digital Literacy - .5 credit
English - 4 Credits (1 course required each year)
Mathematics - 3 Credits (including algebra)
Physical Science - 1 credit
Biology - 1 credit
US & NH History - 1 credit
US & NH Government/Civics - .5 credit
Economics (including Personal Finance)- .5 credit
World History, Global Studies, or Geography - .5 credit
Physical Education - 1 credit
Health Education - .5 credit
Open electives - 6 credits

TOTAL - 20 CREDITS

PLANNING YOUR PROGRAM

The purpose of the program of studies is to provide you with information to help you achieve your educational and career goals. The decisions required in planning your high school program are essential and should be based on factual information gathered from parents, teachers, counselors, and research. If you plan to go directly to work, your courses in high school should prepare you for job entry. Please consider taking courses that will reflect the needs of this workforce. If you plan to pursue a college education (college, business school, vocational-technical colleges, and other specialized programs), you must prepare with an "academic" program. This may mean that in-depth preparation in English, social studies, mathematics, science, and foreign languages will be necessary.

We have arranged a regular transportation schedule so our students can take advantage of the Hugh J. Gallen Career and Technical Center courses at Littleton High School. These classes provide training in such areas as building trades, automotive technology, aviation, business administration, teacher education, bicycle technology, engineering/aviation, and health sciences. This requires special scheduling. If this is your goal, careful planning may make it possible to prepare for further education in a vocational-technical college or a specialized training school program.

SUGGESTED CAREER EXPLORATORY COURSES

GRADE 9

English 9, Integrated Math 1, Physical Science, World History, Spanish 1, Physical Education, Art/Band/Music/Tech/Culinary/Business Electives

GRADE 10

British Literature, Integrated Math 2, Biology, Economics, Health,
Art/Band/Music/Tech/Culinary/Business/PE Electives.

GRADE 11

Career & Tech Center course, American Lit, Integrated Math 3, Science (3rd), U.S. Govt and Politics or U.S. History, Art/Band/Music/Tech/Culinary/Business/PE Electives

GRADE 12

Career & Tech Center course, Composition, Film & Lit, U.S. Govt and Politics or U.S. History, Senior Math Topics or AP Statistics, Career Planning, Art/Band/Music/Tech/Culinary/Business/PE Electives, Internship

SUGGESTED COLLEGE PREPARATORY COURSES

GRADE 9

English 9, Integrated Math 1, Physical Science, World History, Spanish 1, Physical Education,
Art/Band/Music/Tech/Culinary/Business Electives.

GRADE 10

Survey of British Literature, Integrated Math 2, Biology, Economics, Health, Spanish 2, Physics or Chemistry, Art/Band/Music/Tech/Culinary/Business/PE Electives.

GRADE 11

AP English Language & Composition, Integrated Math 3, Science elective, AP U.S. Govt and Politics, Spanish 3, AP US History, AP Statistics, Art/Band/Music/Tech/Culinary/Business/PE Electives.

GRADE 12

AP English Literature & Compostion, Pre-Calculus, Calculus, Science elective, Spanish 4, AP U.S. Govt and Politics, AP US History, AP Statistics, Career Planning, Art/Band/Music/Tech/Culinary/Business/PE Electives, Internship.

PERFORMANCE-BASED GRADUATION

We at Lisbon Regional School believe that in an ever-changing society, all members of the school community:

1. Possess individual worth and need to treat themselves and others with respect and dignity.
2. Learn in a safe, positive, and nurturing environment.
3. Possess creative potential.
4. Learn, given enough time and the appropriate approach.
5. Are role models.
6. Learn best with a strong home/community/school partnership.
7. Can become lifelong learners.

EXIT OUTCOMES

A graduate of Lisbon Regional School:

1. Has a broad base of essential knowledge.
2. Is committed to lifelong learning.
3. Has an internal model of quality work.
4. Has a collaborative work ethic.
5. Possesses a healthy sense of mind and body.
6. Communicates effectively.
7. Makes wise, informed decisions.
8. Understands and appreciates diversity.
9. Participates as a responsible citizen in our local, state, national, and global communities. 10. Possesses the competencies and skills to master various bodies of knowledge in order to reason at complex levels and be an effective problem solver.

COURSE OFFERINGS

Note: Some courses alternate yearly.

ART

Art teaches students to understand and communicate in a visual language. Visual arts skills can be applied to many careers, and students will develop these skills and learn various techniques and art mediums. Art courses rotate; the following courses are offered this year:

Mixed Media (1 credit)
This course allows students to learn a little bit about many art materials. Students will learn about 2D and 3D works, including drawing, painting, printmaking, collage, photography, clay, paper mache, plaster, beading, and more! The goal is to create many pieces in various mediums to expose students to many different techniques in art.

Printmaking (1 credit)
Printmaking is an artistic process based on the principle of transferring images from a matrix onto another surface, most often paper or fabric. Traditional printmaking techniques include woodcuts, etching, engraving, lithography, and screenprinting.

Sculpture (1 credit)
We live in a 3D world, and sculpture is one of the oldest art forms. In this class, students will learn about various sculptural techniques while building 3D art. We will use paper, clay, plaster, cardboard, paint, and found materials to create the sculpture. Students will understand how sculpture has changed and how contemporary artists use materials to create their work.

MUSIC

Through participation in musical activities, a student learns to work and cooperate in a group situation while developing his or her skills. Students gain confidence and satisfaction in being able to perform successfully in the rehearsal as well as in the concert hall.

High School Music (1 credit)
This is a unique music class combining instrumental and vocal performance ensembles. Students may choose to focus in their area of interest. For instrumental performance, students will experience the harmony between contemporary band sounds and classical ensemble music while playing various instruments. This class explores creative and diverse musical expressions, encourages students to perform pieces from various genres and styles, and emphasizes teamwork and musical collaboration. For vocal performance, students will learn fundamentals of harmony, composition, and vocal and instrumental techniques to compose and perform in various musical styles. Participation in the Solo Festival, North Country Festival, and All-State Auditions is only possible for students who participate in this course. No previous musical experience is necessary. This course is repeatable

Music Theory (1 credit) SNHU dual-credit option: 3 college credits
Every musician needs to learn the basics of music theory. This includes note reading, intervals, scales, and much more. It also teaches how music works, enhancing their appreciation of music.

BUSINESS EDUCATION

Accounting (1 credit)
The course is designed to provide the skills and knowledge necessary for entry-level employment in accounting and other business occupations. Accounting is a very beneficial course for those students entering the job market or planning to continue their education in any phase of business. Accounting provides an individual with the knowledge necessary for maintaining personal financial records, and it is an important aspect of nearly all businesses. A study of accounting involves understanding the basic principles of double-entry bookkeeping as they apply to financial records, such as income statements, balance sheets, tax reports, and other statements. Students will learn the use of business technology applications, including spreadsheet development, word processing applications, and database management.

Career & Financial Planning (.5 credit) **Required junior or senior year beginning with the Class of 2028**.
In this quarter-long course, we will explore students' potential careers and spend time planning and preparing for college, trade schools, and the workforce. We will also learn about personal finance, such as how to budget, fill out tax forms, and answer general questions about life skills that will be needed after leaving high school. We will discuss how to live within your means, how to get good credit scores, and the potential pitfalls of using credit cards without a way to pay them off immediately.

Introduction to Business (1 credit)
Students will be introduced to the most current business ownership and management practices. They will learn the skills necessary to manage a business in all its aspects, including assessing consumer needs and wants, selling products or services, business ethics, marketing, advertising, human resources, and financial management.

***Personal Finance** (1 credit) ***Alternates yearly. Next offered in 2026-2027.**
This semester-long course covers the essential personal finance topics necessary to become a financially capable student. We look at the financial impact of career and college choices; banking and budgeting for good money management; taxes; investments and retirement; and consumer awareness. By the end of this course, students will thoroughly understand personal finance topics and be prepared to handle the financial responsibilities that exist after graduation.

ENGLISH

Students must follow a sequence, taking at least one of the following English courses each year:
Grade 9: English 9
Grade 10: British Literature, Survey of British Literature
Grade 11: American Literature, AP English Language & Composition/College Composition DC
Grade 12: Composition, Film, & Lit, AP English Literature & Compostion/Writing about Literature DC

English 9 (1 credit) **Required**
This course consists of a challenging program for writing, literature study, vocabulary, oral work, and the study of informational texts, which prepares each student for the literature, reading, and writing assignments in all other English courses. Extensive writing assignments include narrative, explanatory, and information writing, as well as the argument, creative fiction, and poetry work. A wide range of reading approaches will emphasize understanding and analytical skills. The thematic approach to literature focuses on the themes of family and caretaking; this provides the students with writing topics relating to the works studied and their own experiences.

Survey of British Literature (1 credit) SNHU dual-credit option: 3 college credits
This course is designed and devoted to an in-depth chronological study of the literature of early Britain and the United Kingdom to 1900, as captured in several key works of the masters of British Literature. Beginning with the Anglo-Saxon period, students are exposed to the various periods and styles of British literature and the ideas and social concerns that shaped the writing of those times. Students are challenged to study how various genres of writing and speaking transformed as insular societies transformed into the British Empire of Victorian times. The course focuses on historical and literary themes through reading various writing approaches, including narrative, explanatory and information writing, argument, creative fiction and poetry work, listening/viewing, and speaking. The analysis, interpretation, and appreciation of the many aspects of British literature and related informational texts are emphasized throughout the course. By the end of this course, students will have developed an intimate familiarity with the British literary tradition while also acquiring a firm grasp on how ideas can be communicated and connected to our world today.

British Literature (1 credit)
This course will introduce many of the "great works" of the British literary tradition and will follow a historical chronology. Students will connect the literature of the time periods and the social elements that inform and are influenced by historical events, beginning with the Anglo-Saxons and ending in the mid-20th century. Students study how various genres of writing and speaking helped transform insular societies into what became the British Empire.

Speech & Research (1 credit) **Required**
Speech and Research is a required semester-long course to prepare students for in-depth research and presentation. Students will learn to research, analyze, integrate, and present information in oral and written formats. They will study techniques used in informative and persuasive speaking and writing. Students will also learn the fundamentals of communication and develop skills in preparing, organizing, and presenting speeches.

AP English Language and Composition/College Composition (1 credit) SNHU dual-credit option
AP Language and Composition introduces students to various forms of academic discourse. Students are required to prepare essays in a variety of rhetorical modes, including exposition, description, argumentation, and analysis. In addition to out-of-class writing assignments, students will be required to compose in-class essays in response to readings and other prompts. This course introduces students to process-writing techniques, library

research, and MLA documentation procedures. There will be a brief introduction to APA documentation and writing requirements as well. The primary focus of the course is to help students acquire the writing skills they need to succeed in an academic environment.

AP English Literature and Composition/Writing about Literature (1 credit) CCSNH dual-credit option
Students learn and practice critical reading and writing skills through using various forms of literary analysis that enable them to read, understand, and analyze literary works. Students will read, discuss, and write about a variety of works of narrative prose fiction (short stories and novels), poetry, and drama. The writing practices include both analysis and research, with the end goal for each student being the ability to read critically and to communicate clearly and effectively.

American Literature (1 credit)
This course provides a historical approach to American literature, covering works from 1865 to the present, with particular emphasis on one or more eras within that span. A few earlier texts may provide a contextual framework for later works. Students will read, discuss, and analyze works by major authors closely and critically from a literary perspective (genre, context, and style) and from the range of social, historical, political, and cultural perspectives they represent. Students will read, speak, and write knowledgeably about the development of American thought and values as reflected in the historical development of American Literature, connecting their insights to the works studied and various aspects of current American culture. Literary genres include novels, short stories, poems, autobiographies, and essays. Informational texts and selected films will also be studied. as they enrich and connect to the literature being studied.

Composition, Film, and Literature (1 credit)
Composition, Film, and Literature is a student-input-guided course that covers essential required ELA and literary skills, including but not limited to literary interpretation, grammar, narrative and argument writing, research papers, and oral presentations centered around a student-chosen genre (chosen by a class vote before the beginning of the course). In the past, genres have included dystopian fiction and horror. Students will learn the origins of their chosen genre, general analytical skills, and analytical structures specific to their genre.

Introduction to Creative Writing (1 credit) SNHU dual-credit option: 3 college credits
In a workshop-style class, students will explore the traditions and the craft of creative writing through reading, writing, and revision. We will study various forms of poetry, fiction, drama, and the literature of place through daily and weekly writing prompts and assignments. A final, personal anthology will result from the semester's work.

Creative Nonfiction (1 credit)
Creative Nonfiction is the art of telling a truth. In this class, students will use various literary and poetic techniques and styles to explore their minds and the world around them. The class will begin with the Self, during which students will write and read a variety of personal narratives on varied topics. It will move into the Essay, a form for exploring a person's loves and hates. Literary Journalism, a research-based medium that interacts more fully with the world, will follow. Thematically, the class will end with Personal Cultural Criticism and Satire, during which students will analyze the world around them in addition to observing it. This is both a reading and writing-intensive elective course.

FAMILY AND CONSUMER SCIENCE

Foods 101 (1 credit, CTE)
Foods 101 is an elective course that teaches students the basics of cooking, baking, and reading recipes. We also

cover nutrition, menu planning, careers in the food industry, table etiquette, savvy food buying, and budgeting.

Foods 102 (1 credit, CTE) Prerequisite: Foods 101
In Foods 101, we learned basic cooking techniques. In Foods 102, we will expand upon those basic techniques to make more complicated dishes. We will also spend time looking into foods from countries around the world. We will research each country before we make anything and look at how foods are affected by an area's culture and geography.

Introduction to Human Growth & Development (1 credit) Distance Learning
A set of principles characterizes the pattern and process of growth and development. These principles or characteristics describe typical development as predictable and orderly. We will learn that most children will develop at the same rate and at the same time as other children. Although there are individual differences in children's personalities, activity levels, and timing of developmental milestones, such as ages and stages, the principles and characteristics of development are universal.

Nutrition and Wellness (1 credit) Distance Learning
This course will focus on food and nutrition topics that impact daily nutrition and wellness practices on long-term health and wellness; physical, social, and psychological aspects of healthy nutrition and wellness choices; selection and preparation of Guidelines and Food Guide Pyramid; safety, sanitation, storage, and recycling processes.

Real-World Parenting (1 credit) Distance Learning
It is quite likely that you will face the reality of having children at some time in the future. Unlike many other important situations in life, most of us are not prepared for this crucial role. Real World Parenting helps you begin the lifelong process of learning about child development and parenting.

WORLD LANGUAGE

The world language program offers four levels of Spanish. Classes are usually small, and the development of communicative skills is stressed. Completing one year of a world language is a requirement for graduation.

Spanish 1 (1 credit)
This course emphasizes communication. The proficiency-based approach helps students build the four basic skills: listening, speaking, reading, and writing. This course also aims to increase the student's knowledge and appreciation of the diverse cultures of Spanish-speaking countries.

Spanish 2 (1 credit) Prerequisite: Spanish 1
Students continue from the point at which they end in Spanish 1. The proficiency-based approach is used with an emphasis on communication. The course also aims to increase the student's knowledge and appreciation of the diverse cultures of Spanish-speaking countries.

Spanish 3 (1 credit) Prerequisites: Spanish 1 and 2
Students continue to build upon the skills developed in Spanish 1 and 2. Students will read, listen, speak, and write in Spanish. The focus continues on the 5 C's – communication, cultures, connections, comparison,s and communities.

Spanish 4 (1 credit) Prerequisites: Spanish 1, 2 and 3

Students continue to build upon the skills developed in Spanish 1, 2, and 3. Students will read, listen, speak, and write in Spanish. The focus continues on the 5 C's – communication, cultures, connections, comparisons, and communities.

French 1 (1 credit) Distance Learning
Students are introduced to the French language and cultures in four key areas: listening, speaking, reading, and writing. The course includes video and text presentations about people, places, and events in French-speaking regions.

French 2 (1 credit) Distance Learning
Students continue their introduction to French, reviewing the building blocks in listening, speaking, reading, and writing. Each unit has a new vocabulary theme and grammar concept, reading and listening comprehension activities, speaking and writing activities, and cultural presentations.

HEALTH

Health (.5 credit) **Required**
This course promotes the concept of wellness. The class stresses the skills needed to make the right decision regarding substance use and abuse, personal health, nutrition, prevention of sexually transmitted diseases, consumer health, mental health, and family life. Students participate in the American Red Cross Standard First Aid Course, with certification available upon satisfactory completion. Open to grades 9-12

PHYSICAL EDUCATION

Physical Education & Sports (1 credit)
Physical education is a part of the school curriculum that aims to develop students through physical and mental activity. The primary concern of physical education is to develop the whole person as an integral part of the entire school, to foster health growth, and to lead to a better understanding of one's physical, social, and mental self. Activities include Fall: softball, soccer, pickleball, speedball, ultimate football, street hockey, ring hockey, scooters, and fitness testing. Winter: basketball, gym hockey, volleyball, pickleball, scooters, and badminton. Spring: softball, street hockey, lifetime sports, frisbee activities, nerf ball games, cricket, ultimate football, and fitness testing.

Sports in Society (1 credit)
This class introduces the sociology of sports and encourages students to question and think critically about sports as part of social life. The emphasis is on sports and sport-related behaviors as they occur in social and cultural-related contexts. Students may also exercise at the Evergreen Center up to two times per week. This involves a $30/month membership. If the cost is prohibitive, the school will make arrangements.

Outdoor Fitness (.5 credit)
Outdoor fitness includes weight training, hiking, bike riding, and other outdoor cardiovascular activities. Students must be prepared to be outside in all weather for this class. Students may also exercise at the Evergreen Center up to two times per week. This involves a $30/month membership. If the cost is prohibitive, the school will make arrangements.

MATHEMATICS

At Lisbon Regional School, we offer an integrated mathematics curriculum for high school students. We have chosen the *Core-Plus Mathematics Project*, one of the National Science Foundation (NSF) supported curricula based on the National Council of Teachers of Mathematics (NCTM) Principals *and Standards* document. Lisbon Regional School completely switched to a Standards-Based curriculum many years ago, beginning with K-6 implementing *Everyday Math*, continuing with the middle school adopting *Connected Math 3*, and now concludes in the high school. As students go off to their chosen vocation and diverse post-secondary schools, we are pleased with the performance and achievement students continue to show.

The *Core-Plus* curriculum builds upon the theme of mathematics as sense-making, focusing on problem-solving, reasoning, and communication. Students develop a deep and rich understanding of mathematics topics through investigations of real-life contexts. The curriculum is designed to make mathematics accessible to more students while challenging the most able students. This integrated curriculum replaces the traditional sequence of courses (Algebra I, Geometry, Algebra II), bringing them together through the interwoven strands of algebra and functions, geometry and trigonometry, statistics and probability, and discrete mathematics.

Although all classes will have students of varying mathematics abilities, there are still two paths for students to follow once they have completed the first three integrated courses. This choice should be based on student needs and future career choices. Students intending to study mathematics or science at a four-year college or university should choose sequence A. This sequence is also for students who want to keep their future options open or simply enjoy mathematics. To complete all courses in this sequence, students must take more than one course in their junior or senior year. Students interested in a two-year vocational/technical degree or immediately entering the workforce may choose sequence B. All students are encouraged to take any other mathematics electives as their schedule permits.

Taking mathematics electives is especially important for students choosing sequence B. The *Making the Transition from High School to College* research report (conducted right here in NH) found that 90% of all high school students will someday attend college. According to the Community College System of NH, 50% of students enrolled in “developmental math courses” fail (these courses usually carry no credits but are required because student math skills are too weak). Since students have not completed this entry-level course, they cannot continue working toward their degree. Students who take four or more years of college preparation math usually do not need to take these courses and pass their regular credit-earning courses.

Sequence A

Grade 9: Integrated Math 1
Grade 10: Integrated Math 2
Grade 11: Integrated Math 3 & AP Statistics
Grade 12: AP Precalculus & AP Calculus AB

Sequence B

Grade 9: Integrated Math 1
Grade 10: Integrated Math 2
Grade 11: Integrated Math 3
Grade 12: AP Statistics or Senior Math Topics

Integrated Mathematics 1, 2, & 3 (1 credit for each course) **(Required)**
Each of the three courses of *Core-Plus Mathematics* consists of as many as eight units. Each unit contains two to four multi-day lessons in which major mathematical ideas are developed through investigations focused on sense-making and reasoning. Most investigations are developed from rich applied problems or by examining mathematical patterns and procedures. Prerequisite for Integrated Mathematics 1: Passing Math 8 in Middle School; Prerequisite for Integrated Mathematics 2 & 3: Passing the previous Integrated Mathematics course or equivalent.

Mathematics Topics Studied by Course

Integrated Mathematics 1, Integrated Mathematics 2, Integrated Mathematics 3
Patterns of Change Functions, Equations & Systems Reasoning & Proof Patterns in Data Matrix Methods Inequalities & Linear Programming Linear Functions Coordinate Methods Similarity & Congruence Exponential Functions Regression & Correlation Samples & Variation Patterns in Shape Non-Linear Functions & Equations Polynomial & Rational Functions Quadratic Functions Trigonometric Methods Circles & Circular Functions Patterns in Chance Probability Distributions Recursion and Iteration Inverse Functions

Senior Math Topics (1 credit)
This course is for students who have completed Math 1, 2, and 3. It is a fourth-level mathematics course designed for seniors looking to continue studying the everyday applications of math. This course is project-based. Topics included (but not limited to): surface area and volume as used in the workplace; determining the amount of materials to carpet floors in a house, paint walls, and shingle roofs; the amount of storage space in closets and attics; cost of materials to complete outside landscaping projects; use of linear equations and inequalities to determine amounts of products that will produce the largest profit (linear programming); world population growth to determine if a mathematical model can predict the future growth (regression models); investments and deprecation as it applies to financial calculations (exponential growth and decay); paychecks, hourly vs. salary wages, deductions and taxes; probability and chance. Prerequisites: Math 1, 2, & 3, their equivalent, or the approval of the Math Department.

AP Statistics (1 credit) CCSNH dual-credit option: 4 college credits
This course is for students who have completed Math 1 and Math 2; Math 3 may be concurrent. Statistics is the mathematics of collecting, organizing, and analyzing numeric data to make inferences or predictions. It is, by nature, a much-applied area of mathematics used in nearly every professional job and everyday life. Topics studied will include (but are not limited to) summarizing data and graphical displays, the normal distribution, finding and interpreting regression models, finding samples and designing experiments, probability, random variables, and binomial and geometric distributions. Prerequisite: Integrated Mathematics 1 – 3 or the approval of the Math Department. Students have the opportunity to take the advanced placement test.

AP Precalculus (1 credit) CCSNH dual-credit option: 4 college credits
Pre-Calculus provides knowledge of trigonometry (the study of triangles and their measure) and functions in preparation for calculus or other higher-level STEM (Science, Technology, Engineering, and Mathematics) courses. This course emphasizes mathematical modeling (application), graphing technology, process (not just answers), communication, and problem-solving. Topics include right triangle trigonometry, area, the laws of sine and cosine, trigonometric identities, circular trigonometry, polynomials, rational and exponential functions, polynomial inequalities, operations on functions, translating functions, and logarithms. Prerequisites: Integrated Math 1, 2, & 3 or their equivalents. Students have the opportunity to take the advanced placement test.

AP Calculus AB (1 credit) CCSNH dual-credit option: 4 college credits

This course focuses on describing how variables change in relation to one another by studying functions and their derivatives. This enables mathematicians to solve complicated real-world problems in sophisticated ways that reduce the number of necessary calculations. This first course in calculus will focus on the study of functions, limits, and derivatives and provide an introduction to integration, along with the connection between differentiation and integration. The course will include the use of technology and emphasize the conceptual understanding of the mathematical topics studied while building procedural fluency. Prerequisite: Pre-Calculus. Students have the opportunity to take the advanced placement test.

SCIENCE

Physical Science (1 credit) **Required**
A physical science class covers the major areas of introductory chemistry and introductory physics. This is a lab-oriented class. This is a required science course and is recommended for all 9th graders.

Biology (1 credit) **Required**
Modern principles and concepts of biology. This course will cover the structure and internal processes of cells, the concept of biological diversity, the structure and function of animals and plants, and an introduction to ecology. This is a required science course and is recommended for all 10th graders.

Advanced Biology (1 credit) CCSNH dual-credit option: 4 college credits.
Advanced Biology offers a more in-depth look into biological concepts. Advanced biology will cover the fundamental concepts of the molecular basis of life, cell theory, cell division, cellular respiration, photosynthesis, DNA and RNA, genetics, a survey of life, and an introduction to taxonomy, evolution, and basic ecology.

Anatomy and Physiology (1 credit) CCSNH dual-credit option: 4 college credits
Anatomy and Physiology focuses on the human body. Concepts include cells and tissues, organs and organ systems, and the chemical functioning of the body. Students must have completed 10th-grade biology before enrolling in Anatomy. Students interested in careers in the health field are encouraged to enroll in Anatomy.

Forensics (1 credit) Prerequisite: Physical Science and Biology
This course will be a laboratory and case-study-based class on how forensic scientists collect and process evidence crucial for solving crimes. Types of evidence may include ballistics, DNA and traditional fingerprinting, and identifying unknown substances, including fire debris, controlled substances, and gunshot residue.

Physics (1 credit)
This course focuses on understanding physics principles through real-world applications and everyday examples. Students will explore key topics such as motion, forces, energy, and waves while developing critical thinking and problem-solving skills. Through hands-on activities, demonstrations, and discussions, this course builds a strong conceptual foundation in physics.

***Chemistry** (1 credit) ***Alternates yearly. Next offered in-person in 2026-2027. Distance learning is available if necessary.**
Chemistry is the study of matter and its interactions. Topics include atomic structure, bonding and chemical reactions, gas laws, solution chemistry, acids and bases, and an introduction to organic chemistry. Lab experiences include demonstrations and hands-on labs.

***Environmental Science** (1 credit) CCSNH dual-credit option: 4 college credits ***Alternates yearly. Next offered in 2026-2027.**
Upon completing this course, students can identify basic ecological principles (energy flow, ecosystem structure, resource use), list and describe Earth's major terrestrial and aquatic biomes, and make connections to local natural resources.

SOCIAL STUDIES

Three of the stated *Exit Outcomes* for learning experiences at Lisbon Regional School are to develop students who make wise, informed decisions, understand and appreciate diversity, and participate in society as a responsible citizen. The Social Studies Department is charged with engaging students in historical inquiry. Historical thinking matters in a society that requires people to understand and solve the precarious problems of our time. History is filled with controversies: the quest for power, the inequality of status, and the freedoms of individuals versus the needs of society. These issues must be examined, re-examined, and studied in their historical context to develop citizens who are informed, involved, and equipped to be citizens.

World History (1 credit) **Required**
This survey course focuses on studying the historical development of people, places, and life patterns from approximately 8,000 BCE to the present. Students will develop historical skills and geographical analysis to explore human history. Students will analyze the interaction between geography and civilization(s) development.

Economics & Personal Finance (.5 credit) **Required**
Students will learn about the crucial roles they play and the responsibilities they have as workers, consumers, and citizens. They will see the financial relationship and impact each of these roles plays in a community, a business, a state, and a nation. Discussion, reading, projects, and class activities are designed to teach students how society chooses scarce resources to satisfy its needs and wants.

US/NH History or AP United States History (1 credit) **Required**
This thought-provoking survey course analyzes the political, economic, and social changes and developments during the history of the United States. In an era of confrontation and division, students will learn to cultivate historical thinking habits—to gain historical knowledge, critically evaluate historical evidence, and produce an authentic argument. Students have the opportunity to take the advanced placement test.

***US/NH Government & Politics or AP United States Government and Politics** (1 credit) **Required**
This course analyzes the various institutions, groups, beliefs, and ideas that constitute the United States government and politics. Students learn to analyze and interpret basic data relevant to U.S. government and politics. Through the examination of fundamental constitutional principles; the organization of government at the federal, state, and local levels; the rights and responsibilities of citizenship; the policy-making process; political parties and elections; comparative government and foreign policy; and the American economic system, students learn the skills that will enable them to effectively participate in civic life in the United States and the world. Students have the opportunity to take the advanced placement test.

Social Studies Electives (1 credit each) Distance Learning
Sociology, Anthropology, History of the Holocaust, Psychology, Philosophy, and other social studies courses are

available online through Edgenuity or Early College Online. See the school counselor for more information.

TECHNOLOGY EDUCATION

Photoshop & Solving the Problem (.5 credit each; subject switches between Quarters 1 and 2.)
Photoshop allows you to manipulate existing images and create new content digitally. Students will learn to use filters and apply special effects to whole images or specific elements. By the end of this part of the course, you can produce realistic photos of you on vacation in exotic places or meeting celebrities. You'll create your own currency and design album art for your favorite band. Solving the Problem is designed to equip students with the essential tools and strategies to tackle challenges effectively inside and outside the classroom. Throughout this part of the course, students will engage in hands-on activities, collaborative projects, and real-world scenarios to sharpen their problem-solving abilities.

Robotics 1, 2, or 3 (1 credit)
Students will learn basic robotics coding using VEX CodeV5. VEX V5 parts will be used to create a variety of robots to complete many different tasks. Once students have a basic understanding of the platform, they will be invited to solve the problem posed annually for the VEX robotics challenge. Any student who wants to compete in one of the regional competitions will have that opportunity. This course is repeatable.

Broadcast & Media Production; Advanced Broadcast & Media Production (1 credit each)
Students will study current trends in online media, including podcasts, web video streaming, social media, and video production. Students will also examine the principles of writing news and information for radio, TV, podcasts, and live streaming.

Drones 1 or 2 (1 credit each)
This course comprehensively explores drones, encompassing their history, technology, applications, and ethical considerations. Students will delve into theoretical concepts and practical skills, equipping them with the knowledge and proficiency to navigate the rapidly evolving landscape of drone technology.

Extended Learning Opportunities (ELO)

Internship (1 credit)
The North Country Workplace Education Program (NCWEP) is a partnership between local businesses and Lisbon Regional School designed to build, maintain, and expand a skilled workforce through high school internships. Internships are available for juniors and seniors who are interested in exploring real-world opportunities and career paths. Students participate in internships during school hours and can receive credit for successful participation in the program. Student internships are available in a number of different locations and job types. Paid internships are also available.

Through planned activities and learning objectives, students will have the opportunity to:

- Experience the connection between things learned in school and skills and knowledge needed in the workplace.
- Explore various careers, jobs, and worker tasks to help interns consider possible careers and education for the future.
- Develop entry-level job skills.
- Develop the responsibility and maturity necessary for functioning in the workplace.

- Earn academic credit for workplace experiences.

To achieve an internship credit, students must complete the following:

- Complete the internship application
- Create a formal cover letter and resume
- Sit for an interview with a perspective site supervisor
- Once accepted, regularly attend the placement and;
- Maintain a daily journal of the placement,
- Develop and complete site-specific competencies individually created by the student and site supervisor to meet the learning goals of the student and the needs of the business.

Interested students should see Mr. Dunn or Mr. McKeever. To be considered for work releases rather than internships, students must have completed 7.5 elective credits and be on track with core requirements to graduate. Students do not earn credits for work releases. Students must also provide proof of work completion.

Career Education (Teacher Assistant Internship) (1 credit)
This individualized instruction program utilizes qualified students' talents to enrich the elementary school children's curriculum and provide other special services as needed.
1. The school counselor at the elementary level will provide educational materials and supervision in cooperation with the classroom teacher.
2. The coordinator and the classroom teacher provide plans to be carried out by the tutors.
3. This program enables elementary students to receive the individual attention they require.
4. Weekly reports are turned in to the coordinator. Monthly meetings are held to discuss areas of concern. Daily journals are kept and checked by the classroom teacher.
5. A checklist evaluation of the tutor is submitted by the classroom teacher to the coordinator.

Digital Literacy and Computer Science

Digital Portfolio & Portfolio Defense (1 credit) (**Required: Fulfills ICT Requirement**)
Students will develop a digital portfolio highlighting their high school accomplishments and demonstrate competency in the following:
1. Use of common productivity and web-based software
2. Use of a variety of multimedia software and equipment
3. Configuring computers and basic network configurations
4. Apply programming concepts used in software development

Computer Science Principles (1 credit) Distance Learning
Students will explore the foundations of computer science using videos, hands-on activities, programming, investigations, and projects. They will experience much of what computer programmers do in planning, developing, testing, and refining software. Security is a key topic, and students will learn techniques for recognizing and guarding against security threats. Every unit has two to three projects, allowing students to write programs and develop security policies, analyze real-world data, solve network problems, plan a mobile app, and more. Interwoven throughout the course are spotlights on a wide

Fundamentals of Digital Media (1 credit) Distance Learning
Fundamentals of Digital Media presents high school students with an overview of the different types of digital media and how they are used in the world today. This course examines the impact that digital media has on

culture and lifestyle. The course reviews the basic concepts for creating compelling digital media and introduces several different career paths related to digital media. Students learn about the tools used and best practices employed for creating digital media. In the course, students explore topics such as the use of social media, digital media in advertising, digital media on the World Wide Web, digital media in business, gaming and simulations, e-commerce, and digital music and movies. Students also review the ethics and laws that impact digital media use or creation.

DISTANCE LEARNING EDUCATION PROGRAM

The Distance Learning Program provides students with additional quality educational opportunities. Through accredited online schools and Edgenuity courseware, students can advance their studies in the direction and content area they choose. With over 600 online course opportunities available, Lisbon Regional School recognizes that preparing each student for lifelong learning, college, and the workforce requires educational leadership and innovation. Lisbon Regional School is a leader in helping students reach their 21st-century learning needs and goals.

Through the Distance Learning Program, students are strongly encouraged to enroll in a course offered through a rigorous online school program. Available courses include all academic levels: *Advanced Placement, Honors, Dual Credit (college level), Standard, and Competency Recovery.* Expanding learning opportunities for our students gives them a broader pathway toward their chosen career path.

Online courses are intended to supplement in-person learning but not replace LRS courses. Students choose their courses and have them approved by the distance learning teacher and high school counselor. The school counselor and distance learning teacher may evaluate whether online learning is a good fit for students based on their ability to work independently in a quiet environment. Additionally, online courses are not advised for 9th graders under normal circumstances. Each block is limited to about eight students. Students should maintain steady progress with their online courses during the semester. If a student finishes with adequate time, the student is expected to add a full or partial credit course.

A student can be enrolled in one or more of the following online schools or courseware: Virtual High School (thevhscollaborative.org), Early College Online (Community College System of New Hampshire), and Edgenuity courseware.

Please see Mrs. Blake or Mr. Dunn to learn more about the Distance Learning Program and to see a list of course options.

SPECIAL EDUCATION INCLUSION PROGRAM

Special education for grades seven through twelve provides the following services.

1. Individualized educational plans for students who qualify under PL 94-142.
2. Individualized instruction and group instruction for identified students in language arts, math, and other subject areas as needed.
3. Consultation support for classroom teachers with making instructional and programming modifications for mainstreamed students.
4. Behavioral contracts and conflict-resolution instruction.
5. Life skills instruction.
6. Transition planning.
7. Monitor students' progress in mainstream classes.

8. Formal evaluations for students identified as having special needs.

HUGH J. GALLEN CAREER & TECHNICAL CENTER
at LITTLETON HIGH SCHOOL

For an LRS student to be eligible to take classes at The Hugh Gallen Regional Career and Technical Center, they must be in junior status with 13 credits earned by the end of their sophomore year. The mission of Hugh J. Gallen Regional Career & Technical Center is to "empower students with the skills necessary for continuous development, education, and employment." Making learning relevant is one of the best ways to ensure students stay interested in their coursework while preparing them for college and the workforce.

The Hugh J. Gallen Career and Technical Center has four main goals, which focuses on students being "College and Career Ready"-

- For students to complete program and industry competencies.
- To prepare students with skills and credentials that will give them an advantage in the job market.
- To prepare students to continue their education at two or four-year post-secondary institutions, colleges and universities.
- To develop employability skills (soft skills).

Career and Technical programs provide our students with the theory and practical application through the use of state-of-the-art technologies. Our students leave our programs with the knowledge and skills necessary to be competitive at entry-level employment or post-secondary studies. All of our students must successfully meet national competencies. Our students also often achieve a recognized industry credential. In all of our programs, students also have the opportunity to earn college credit.

Programs offered at the Center include:

- Accounting
- Automotive Technology
- Bicycle Technology
- Business Entrepreneurship
- Construction Technology
- Health Science Technologies
- Robotics, Aerospace Engineering & Design
- Teacher Education
- Work Site Learning/Student Services

ARTICULATION AGREEMENTS

Most of our CTE programs have articulation agreements with post-secondary institutions. These agreements grant post-secondary education credit for completing courses at Littleton High School/Hugh

Gallen Career & Technical Center upon matriculation to the post-secondary school offering the agreement. Below is a list of the Career and Technical Education programs at LHS and the post-secondary institutions to which those programs are articulated. Since these agreements may change without notice and new agreements may be added, you should check with Mrs.Rachelle Cox, CTE Principal, if you have any questions

CTE Program	Post-Secondary School	Available Credit
Accounting	Keene State College	8 credits
Automotive Technology	Central Maine Community College	5 credits
Automotive Technology	Lincoln Technical Institute	2 courses (and corresponding credit)
Automotive Technology	Universal Technical Institute	4 tests (and corresponding credit)
Automotive Technology	University of Northwestern Ohio	12 credits
Building Construction Technology	Keene State College	8 credits
Careers in Education	Keene State College	8 credits
Careers in Education	White Mountains Community College	6 credits
Health Science Technology	White Mountains Community College	6 credits

Career and Technical Education (CTE) Program curricula are designed for four semesters or a two-year sequence. Students should begin their Career and Technical Program in their junior year. Due to student enrollment limitations, students enrolled in a CTE program should be committed to the program for a minimum of two years or four semesters. All CTE programs are two-year courses of study designed for juniors and seniors, and they follow the state- and nationally approved curriculum and competencies. Early withdrawal from a CTE program could result in a loss of credit.

CTE programs also offer students the opportunity to participate in a Career and Technical Student Organization (CTSO). Students are encouraged to join the CTSO which is affiliated with each program in the CTE center. Members of the CTSO will have the opportunity to engage in state and national competitions and local community service projects throughout the school year.

~ THE FOLLOWING COURSES ARE FOR JUNIORS AND SENIORS ONLY ~

Architecture and Construction Career Cluster

BUILDING CONSTRUCTION TECHNOLOGY I

Y 2.0 credits Grades 11-12

This is the first year of a two-year sequence of courses designed to teach students the basics of residential construction and help them explore career opportunities in the construction industry. The first semester focuses

on safety on the job site, identifying and using tools safely, designing and constructing floor systems, framing walls, and roof systems. In our new facility, students have the opportunity to construct module homes in an indoor-friendly environment. Students also work on other construction projects, including sheds and smaller structures. Students also have the opportunity to develop skills in the electrical and plumbing industry. Students will have the opportunity to complete their OSHA Ten-Hour Safety Certification online.

BUILDING CONSTRUCTION TECHNOLOGY II

Y 2.0 credits Grades 11-12

Prerequisite: *Building Construction Technology I*

Students who have a serious interest in the construction industry will find this course gives them the skills to enter the job market and also prepares them to go on to a two or four-year college program in a construction-related field. The class will work on larger structures using hand tools and power tools. They may also choose to take the National Metal Building Contractors Training Course and test online to earn this credential. Each of these certifications is a valuable credential for students to add to their professional portfolio

Business & Finance Career Cluster

ACCOUNTING

EARLY COLLEGE- ACCOUNTING I EC

S 1.0 credit Grades 11-12

Is there business in your future? In Accounting I, students will build critical skills for a career as a bookkeeper, accountant, business administrator, or manager. It is also a valuable skill for use in dealing with personal financial situations. Students will learn to use the basic accounting equation to analyze, journalize, and post business transactions. Preparation of financial statements and payroll records as well as maintaining a checkbook will also be covered. Accounting is a web-based class. Computer simulations will be used to put all the pieces together using software that mimics industry standard software like QuickBooks. This course will help prepare students to enter the job market. *CTSO Affiliate: FBLA*

ACCOUNTING II

S 1.0 credit Grades 11-12

Prerequisite: *Accounting I*

Accounting II is designed for those students who are planning to study business or accounting after they graduate from high school. Accounting II will pick up where Accounting I left off. There will be an emphasis on departmentalized accounting, corporate management, and cost accounting. Students will complete computerized simulations to practice their skills. Accounting II will require mastery of basic computer skills and advanced thinking skills as students analyze, interpret, and compare information. This class will also cover an introduction to QuickBooks accounting software. *CTSO Affiliate: FBLA*

BUSINESS & MARKETING

EARLY COLLEGE- BUSINESS ENTREPRENEURSHIP EC

Y 2.0 credits Grades 11-12

Are you interested in owning your own business? Perhaps you are interested in business management, marketing, advertising or sales. If you are interested in any of these areas, this is the course for you. Business Entrepreneurship is a project-based course that will introduce you to the business career path—one that can take you from managing a retail business to the marketing and social media of your favorite sports team. This class will prepare you to enter a wide variety of business careers. We will focus this year on the skills needed to become an entrepreneur and own your own business. Time will be spent exploring the entrepreneurial mindset, the types and organization of business in the United States, how business works in the American economy, business ethics and law, human resources, and what it takes to be a good employee in the business world today. Business Entrepreneurship is the first year of a two-year business program. Students describe this course as "helpful, interactive, entertaining, brilliant, and an opportunity to learn real-world information". CTSO Affiliate: FBLA

GLOBAL ENTREPRENEURSHIP & MARKETING

Y 2.0 credits Grades 11-12

Prerequisite: *Business Entrepreneurship*

Global Entrepreneurship & Marketing is the second year of the two-year business program. This project-based class will pick up where Business Entrepreneurship ended. This year will be broken down into two semesters, the first semester will focus on how to operate a business outside of the United States. Expanding a business around the globe brings a variety of challenges to businesses both small and large. Diverse cultures, laws, languages, and currencies add to the mix of challenges. The second semester will focus on the world of marketing—including sales, advertising, promotion, distribution, pricing, and the career pathways in business and marketing. This course is designed for those students who have an interest in pursuing a career in business, global business or marketing as well as those who just want to broaden their knowledge in the business field. Students who have taken this course in the past described it as "Awesome, educational, interesting, and phenomenal. What a great way to prepare for my college courses." ***CTSO Affiliate:*** *FBLA*

Health Science Technologies

DENTAL ASSISTING PROGRAM

Y 2.0 credits Grades 11-12

Prerequisite: *Health Science Technology 1*

Once students complete Health Science Technology I, they will continue in Health Science Technology II in a dental pathway. Students will gain knowledge during classroom coursework in Tooth Morphology, Oral Histology, Dental Image Processing, Landmarks of the face and Oral Cavity, Nutrition and Preventive Dentistry, Dental Caries, and Dental Charting. During dental Lab sessions students will acquire 'hands-on' clinical skills in OSHA-approved Dental Treatment Room Disinfection and Dental Instrument Processing and Sterilization Techniques. Students will also be able to perform intra-oral exams on a patient and oral cancer screenings, seat a patient and update a dental and medical history, Dental Instrument identification, Moisture Control, and Chairside Dental Assisting using the 4 handed technique. Upon passing clinical competencies, students can continue their skills in the dental community through internships as Dental Assistants in local dental offices. Students will also be required to pass the OSHA Bloodborne Pathogen Standard for dental employees. Upon successful completion of the Dental Assisting Program, students will be job-ready as a Traditional Dental

Assistant and have the option to continue with the 3500 clinical chairside hours needed to take the CDA exam through DANB. They can also continue their post-secondary education in Dental Hygiene or Dentistry.

Students are required to wear scrubs (top and bottom) to class each day. It is recommended they have 3-4 sets of scrubs.

Students have the option of taking the e-start course in Dental Assisting Science 1 and transferring 3 credits into the NHTI Dental Assisting Program in Concord, NH.

Engineering Cluster

Career Pathways in Technology

Robotics, Aerospace & Design I and II

Robotics, Aerospace & Design I

Y 2.0 credit *Grades 11-12*

This dynamic, hands-on course introduces students to the fundamentals of robotics, aerospace, and engineering design, forming the foundation for a two-year Career and Technical Education program. Students will explore key concepts in aviation, unmanned aircraft systems, and programming, while also gaining exposure to cutting-edge materials science and aerospace engineering principles. Designed for students interested in careers in aerospace, robotics, aviation, or related engineering fields, this course offers pathways to industry-recognized credentials and post-secondary opportunities.

Aviation and Aerospace Foundations: Students will learn about pilot and aircraft qualifications, principles of flight, aerodynamics, flight maneuvers, airport operations, safety protocols, and cross-country flight planning. The curriculum prepares students to take the Federal Aviation Administration (FAA) Private Pilot Knowledge Exam under FAR 61.05. In addition, students will delve into unmanned aircraft systems (UAS), studying regulations, operating requirements, weather effects, and emergency procedures, equipping them to pass the FAA Part 107 Remote Pilot Knowledge Test and earn Remote Pilot Certification.

Robotics and Programming: Through an Introduction to Programming module developed by the FIRST Robotics Competition, students will gain a foundational understanding of Java programming, learning concepts like objects, methods, conditionals, and command-based programming. The curriculum also aligns with content found in Introduction to Java or AP Java courses, providing opportunities for certification or advanced placement credit.

This course equips students with critical skills, prepares them for industry-recognized credentials such as FAA certifications, and lays the groundwork for careers in aerospace, robotics, and engineering. Successful completion positions students for further studies or employment in high-demand technical fields.

Robotics, Aerospace & Design II

Y 2.0 credit *Grades 11-12*

This advanced course is the second part of a two-year Career and Technical Education program designed to deepen students' expertise in robotics, aerospace, and engineering design. Students will engage in advanced aviation concepts, practical unmanned aircraft system (UAS) applications, and capstone projects while pursuing industry-recognized credentials that prepare them for careers in aerospace, engineering, and related technical fields.

Advanced Aviation and UAS Applications: Building on foundational knowledge from Year 1, students explore advanced topics such as instrument flight, commercial aviation, and future innovations in the aerospace industry. Hands-on learning opportunities include partnerships with local flight instructors, FAA-certified flight simulators, and the potential to log flight hours toward earning a 14 CFR Part 61 Subpart E Private Pilot Certificate. Students also examine practical UAS applications in agriculture, public safety, commerce, and environmental studies, while considering ethical and maintenance challenges. This curriculum prepares students for contemporary aviation challenges and career pathways.

Capstone Project and Research: Students design and execute a personalized capstone project aligned with their interests in aviation, robotics, or engineering. By conducting in-depth research and collaborating in small groups or independently, students demonstrate mastery of a contemporary topic in aerospace or UAS operations. Capstone projects integrate knowledge from prior coursework and culminate in a professional presentation of findings.

CAD and Industry Certification Opportunities: To support capstone projects, the course includes two Computer-Aided Design (CAD) modules developed by the FIRST Robotics Competition, covering sketching, part modeling, assembly, and technical drawings. These modules prepare students for industry certifications, including the Solid Edge Mechanical Associate and Onshape Certified Associate.

Portfolio Development and Career Preparation: Students create a learning portfolio to document their progress, self-assess, and refine their skills as they work toward credentials. With the support of the Program Advisory Committee, students can explore aviation scholarships to offset flight hour costs, positioning them for further studies or immediate employment in high-demand industries.

This course equips students with technical skills, practical experience, and industry-recognized certifications, providing a pathway to success in aerospace, robotics, and engineering careers.

Pilot Pathway

11th-grade: Private Pilot Fundamentals

This course will include topics such as pilot and aircraft qualifications, principles of flight, aerodynamics, spin awareness, flight maneuvers, pre- and post-flight procedures, airport operations, regulations, safety, weather, aircraft systems, weight and balance, human factors, cockpit management, emergency procedures, night operations, aeronautical decision-making, cross-country flight planning, airspace, and other topics that help prepare students to take and pass the Federal Aviation Administration written examination per the requirement of the Federal Aviation Regulations FAR 61-05 Section 61.3.

12th-grade: Aviation Safety & Pilot Training (Capstone)

After having prepared for the Private Pilot Knowledge Test and Part 107 Remote Pilot Test in the previous year, students will examine advanced aviation topics and aviation career options. Instrument flight, commercial aviation, and advanced aircraft systems begin the semester. Looking into the future, students then explore new horizons in the aerospace industry. What might aviation look like five, ten, or twenty years into the future? The focus then turns to business development opportunities in aviation. Finally, students learn about and conduct different types of research in preparation for their capstone project. Leveraging partnerships with local flight instructors, aviation facilities, and FAA-certified flight simulators, students, having met all prerequisites, will have the opportunity to accrue hours towards earning their 14 CFR Part 61 Subpart E Private Pilots Certificate. The Program Advisory Committee will support students with applying for relevant scholarships to offset the costs of logging flight hours.

Postsecondary: Workforce, 2 and 4-year programs, business ownership

Small Unmanned Aircraft Systems Pathway

11th-grade: UAS Operations

This course is an introduction to the fundamental concepts of unmanned aircraft systems. Topics include small unmanned aircraft systems regulations, airspace classification, and operating requirements, flight restrictions affecting small unmanned aircraft operation, safety protocols, weight and balance, operating environments, aviation weather sources and effects of weather (micro-meteorology) on small unmanned aircraft performance, small unmanned aircraft loading and performance, emergency procedures, and crew resource management. This course will prepare students for the Federal Aviation Administration (FAA) knowledge test to become a certified Remote Pilot under the FAA's UAS Rule (Part 107).

12th-grade: UAS Design & Applications (Capstone)

Practical applications of UAS operations including agriculture, public safety, photography, ethics, preventative maintenance, commerce, environmental studies, and other contemporary uses will be explored. Students will work as individuals or in small groups to study and report on an approved aviation topic of their choosing. The goal of this capstone course is to allow students to demonstrate an understanding of a contemporary topic in aviation related to unmanned aircraft operations.

Postsecondary: Workforce, 2 and 4-year programs, business ownership

Aerospace Engineering Pathway

11th-grade: Aerospace Engineering and Design I

Students will explore the dynamic intersection of materials science, aerospace engineering, and computer programming in this hands-on and intellectually engaging course. Designed for high school students interested in pursuing careers in aerospace engineering, aviation, or related engineering fields, this course provides a comprehensive introduction to the fundamental concepts and skills essential to employment in the aerospace industry or related engineering fields. Successful completion of this course prepares students for further studies in aerospace engineering, materials science, robotics, computer programming, or related fields at the post-secondary level.

To broaden student opportunities for career exploration, this course integrates an Introduction to Programming course module created by the FIRST Robotics Competition. In this module, students learn Java programming fundamentals using the WPIlib. embedded lessons that correlate with content found in an Introduction to Java or AP Java course taken as a certification or concurrent enrollment course. It includes concepts such as objects, methods, conditionals, advanced conditionals, command-based programming, and command groups.

12th-grade: Aerospace Engineering and Design II (Capstone)

This course builds upon concepts covered in Aerospace Engineering and Design I by providing students with the opportunity to design a capstone project aligned with a specific engineering field. To support students in the design and execution of their engineering capstone project, this course integrates two different CAD modules developed by the FIRST Robotics Competition that help students pursue industry certifications while also connecting that knowledge to the skills they will use on their FIRST team. These courses include concepts such as sketching, part modeling, assembly, and drawings. Students document their learning with a learning portfolio and self-assessments and these tools help students monitor their learning on their path to an industry certification. These courses are available for Solid Edge Mechanical Associate and Onshape Certified Associate certification.

Postsecondary: Workforce, 2 and 4-year programs

Aviation Maintenance Pathway

11th-grade: Aviation Maintenance I

This two-part course aligns with the Choose Aerospace Aviation Maintenance curriculum. This curriculum was developed in partnership with Clemson University Center for Workforce Development (CUCWD), ARCS Aviation, the Aviation Technician Education Council (ATEC), labor organizations, industry employers, and education partners. This program puts students on a direct path to FAA mechanic certification (Part 147). The Choose Aerospace curriculum aligns with emerging FAA Mechanic Airman Certification Standards (ACS) to cover the general knowledge and skills required for FAA mechanic certification. Curriculum subjects cover every one of the knowledge, skill, and risk mitigation elements outlined in the general portion of the ACS.

12th-grade: Aviation Maintenance II

The 12th-grade Aviation Maintenance course covers the remaining FAA Mechanic Airman Certification Standards (ACS). Students who complete the Choose Aerospace coursework can pursue FAA mechanic or repairman certification through work experience or by finishing the required coursework at one of 190 Federal Aviation Administration (FAA)-certificated aviation maintenance schools. The PAC will build local pathways for students, either through matriculation agreements with FAA-certificated programs or direct-hire agreements with local aviation companies.

Postsecondary: Part 147 Certified Program, Apprenticeship, or Workforce

Education & Training Career Cluster

CAREERS IN EDUCATION I EC
Y 2.0 credits Grades 11-12

This course is ideal for students who are interested in a career in education. Students will learn about the many career opportunities available in education and the important roles these occupations play in the education world. As part of this course, students explore the interrelatedness of the different areas of development and how development, environments, and experience all affect learning. Many hours are spent in different classrooms throughout the school district where students observe veteran teachers, learning practical guidance and discipline techniques, and teaching strategies used in the classroom. Students also spend time student-teaching in our on-site laboratory school, Little Leopards Learning Center practicing their classroom management and teaching skills. The Teacher Education curriculum also includes units on Observation and Assessment, the Study of

Diverse Learners, Theory and the History of Education, School Law and Current Issues in Education, Curriculum Building, Planning for Instruction, and Differentiated Instruction. CTSO Affiliate: Educators Rising

CAREERS IN EDUCATION II EC
Y 2.0 credits Grades 11-12

Prerequisite: *Careers in Education I*

Child Development Highly Recommended

Careers in Education II is a continuation of the Careers in Education I course. Emphasis is on further exploration of teaching and students are channeled toward the age and subject that they are interested in. Students choose to focus their studies on Early Childhood, Elementary Education, Secondary Education, or Special Education. Job shadows, internships and student teaching can be individualized to accommodate each student's interests and needs. As students continue to divide their time between classroom instruction and student teaching, they have the opportunity to practice their skills of planning and presenting lessons that focus on creativity, diversity, and individual learning styles including working with special needs learners. Students are placed in local Elementary and Middle/High Schools, or Early Childhood Centers where they work in the classroom alongside a veteran teacher. Students interested in Speech and Language Therapy, Occupational Therapy, and Special Education will interact and learn from therapists who work in local elementary schools and/or in the lab preschool. Students completing this two-year course will be well prepared to enter a two or four-year college and continue their studies toward a degree in education or a related field. CTSO Affiliate: Educators Rising

Health Science Career Cluster

HEALTH SCIENCE TECHNOLOGY I EC
Y 2.0 credits Grades 11-12

Prerequisite: *Biology*

Health Science Technology is an exciting program for students interested in pursuing a health career or a career in the human service field. This two-year course of study follows a state and nationally-approved curriculum. Students pursue academic studies combined with "hands-on" clinical work. First-year students learn about the broad spectrum of health careers available to them through audio/visuals, guest speakers, and job shadows. They study the body systems (anatomy and physiology), patient safety, medical law and ethics, medical terminology, basic aspects of patient care, communication, and leadership skills. First-year students will become certified in CPR. Students also have the option of taking Medical Terminology, a 3-credit college Running Start course. Leadership and career development skills are offered through participation in HOSA. This includes competitions at the state and national levels. CTSO Affiliate: HOSA–Future Health Professionals

HEALTH SCIENCE TECHNOLOGY II (L)

Y 2.0 credits Grades 11-12

Prerequisite: *Health Science Technology I*

During the 2nd year of the program, students complete their study of anatomy and physiology and concentrate on completing all the required HST competencies at a proficient level. The curriculum can be tailored to the individual needs of the student with more in-depth career choice of study and the completion of clinical student internships. Students will

build on the skills they learned during the 1st year and will continue to develop clinical, leadership, assessment, and communication skills in the classroom lab and in the healthcare community. Second-year students may take the LNA (Licensed Nursing Assistant) course. After passing the State Licensing Exam, they can obtain their LNA and are eligible for employment as an LNA when they graduate from high school. The EMT career tract is also offered to students interested in pursuing a career as an EMT or Paramedic. Students have the option of taking the Essentials of Exercise Science 3 college credit Running Start course as part of the second-year curriculum. This option is ideal for students interested in Physical or Occupational Therapy, Sports Medicine or Athletic Training. Other career tract options include Dental and Medical Assisting. *CTSO Affiliate: HOSA–Future Health Professionals*

Dental Assisting Program Grades 11-12

Course #950 Y 2.0 credits Grades 11-12

Prerequisite: Health Science Technology I

During the second year of study, students will continue in the Health Science Technology Program in a dental pathway. Students will gain knowledge during classroom coursework in Tooth Morphology, Oral Histology, Dental Image Processing, Landmarks of the Face and Oral Cavity, Nutrition and Preventive Dentistry, Dental Caries and Dental Charting. During dental lab sessions students will acquire "hands-on" clinical skills in OSHA approved Dental Treatment Room Disinfection and Dental Instrument Processing and Sterilization Techniques. Students will also be able to perform intra oral exams on a patient and oral cancer screenings, seat a patient and update a dental and medical history, Dental Instrument identification, Moisture Control and Chairside Dental Assisting using the 4 handed technique. Upon passing clinical competencies, students can continue their skills in the dental community through internships as a Dental Assistant in local dental offices. Students will also be required to pass the OSHA Bloodborne Pathogen Standard for dental employees. Upon successful completion of the DentalAssisting Program, students will be job ready as a Traditional Dental Assistant and have the option to continue with the 3500 clinical chairside hours needed to take the CDA exam through DANB. They can also continue their post-secondary education in Dental Hygiene or Dentistry. Students are required to wear scrubs (top and bottom) to class each day. It is recommended they have 3-4 sets of scrubs. Students have the option of taking the e-start course in Dental Assisting Science I and transferring 3 college credits into the NHTI Dental Assisting Program in Concord, NH.

Law, Public Safety, & Security Career Cluster and Manufacturing Career Cluster

– PROJECT BIKE TECH –

Do you like working with your hands? Do you prefer learning by doing? Do you like bikes? Project Bike Tech is a two-year course that teaches you how to work on bikes and about the bike industry. You get to build bikes, work on bikes, and ride bikes. You will learn valuable job skills that will make you more appealing to employers. You will learn about the many types of jobs in the bike industry.

BIKE TECH I

Y 2.0 credits Grades 11-12

Year one of the two-year Project Bike Tech program is designed to introduce students to career pathways within the bicycle industry and prepare them for entry-level positions as bicycle technicians or retail associates.

BIKE TECH II

Y 2.0 credits Grades 11-12

Prerequisite: *Bike Tech II*

Year two of Project Bike Tech includes more complex bicycle mechanics: front and rear suspension, and hydraulic brakes, to include complete overhauls. In depth understanding of the bike industry will be explored. Industry-recognized certificates of achievement are available

Transportation, Distribution & Logistics Career Cluster

AUTOMOTIVE TECHNOLOGY I

Y 2.0 credits Grades 11-12

If you are interested in the fast-growing automotive and transportation industry including auto technician, truck and diesel technician, auto collision technician, motorcycle and boat maintenance as well as many engineering and fabrication industries, this course is for you. This is the first in a two-year program designed for juniors and seniors. This program follows an ASE-certified curriculum and is sponsored by the NH Auto Dealers Association. Students gain hands-on skills working on vehicles in the newly constructed shop with nine vehicle lifts. First-year students will learn about safe tool usage, shop practices and lift safety, as well as preventive maintenance, braking, and suspension systems. Students will earn the SP2 safety certification, ALI Lift certification, and Valvoline Oil certification. This course will prepare students to take the ASE certification tests in brake and suspension systems. *CTSO Affiliate: Skills USA*

AUTOMOTIVE TECHNOLOGY II EC

Y 2.0 credits Grades 11-12

Prerequisite: *Automotive Technology I*

This program completes an ASE certified curriculum which is sponsored by the NH Auto Dealers Association. This course will cover two sections – electrical fundamentals and engine performance. The electrical section will include fundamentals and auto systems troubleshooting. The engine performance section will cover engine rebuilding and the latest in computerized engine scanner diagnostics and check engine codes. The second-year student will also have the opportunity to learn welding and fabrication skills. The Auto Club, a chapter of SkillsUSA, is involved in two auto competitions with many scholarships available to top competitors. Auto II students are encouraged to take part in the Co-op Program to work in local shops and dealerships in the community. We are visited by colleges offering auto technology, truck and diesel technology, collision repair, airplane technology, welding technology, motorcycle and boat technician technology. This course will prepare the student to take the ASE certification tests in electrical and engine performance. CTSO Affiliate: Skills USA

LRS INTERSCHOLASTIC ATHLETICS

PHILOSOPHY- A good athletic program is an integral part of our total school program. It will develop a feeling of pride and accomplishment within the school. In Lisbon Regional High School, all sports and related activities are important and should receive equal consideration. Students have an opportunity to compete in a worthwhile activity that otherwise might not have been possible. We hope that from this competition, Lisbon athletes will be able to develop positive attitudes and leadership skills that will benefit them throughout their lives. In essence, the major aim is to develop a fine athletic program without losing sight of educational values such as sportsmanship, health, and scholastic achievement. The program is to occupy a position in the curriculum comparable to that of other academic subjects or co-curricular activities and is to aid in promoting school

morale.

Objectives

1. The athletic program will constantly stress sportsmanship.
2. Development of physical vigor and desirable health, sanitation, and safety habits should be fostered.
3. Athletics will allow athletes to make genuine friendships with their squad members and lasting friendships with members of competitive teams.
4. Athletes will realize that athletic competition is a privilege with definite responsibilities.

Scope of Program

Lisbon Regional High School participates in the following varsity sports: soccer, basketball, fishing, baseball, and softball.

Eligibility

Our eligibility requirements are in compliance with those adopted by the New Hampshire Interscholastic Athletic Association (NHIAA), and some areas are more restrictive. These apply to both boys and girls. A complete copy of NHIAA eligibility rules is available from the Athletic Director and Principal. For a boy or girl to compete in interscholastic athletics, he or she must comply entirely with all regulations and requirements set forth by the NHIAA. The primary state requirements are as follows:

1. May compete in athletics during the school year if his or her 20th birthday is after September 1, provided a student has not enrolled in high school for more than eight semesters.
2. May compete if he/she satisfactorily completes four units of work during the previous ranking period (Lisbon Regional Junior/Senior High students must have a passing grade in all subjects).
3. May compete if he/she has been in attendance beyond eighth grade for no more than eight semesters.
4. May compete if he/she is considered a permanent resident of the school district and/or the school's responsibility. (See NHIAA handbook exception.)
5. May compete if he/she has passed a physical examination by a doctor.