

# Lisbon Regional School

## PROGRAM OF STUDIES



2022-2023

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## **MISSION STATEMENT**

The mission of Lisbon Regional School 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 aesthetic and cultural diversity of the changing world. 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 for the purpose of providing information to both students and parents. Lisbon Regional High School has made a continuous effort to upgrade its course offerings as new and accepted programs are developed on local, state, and national levels. Because of this, programs are subject to change.

Courses selected by a student are approved by their parents, the guidance counselor, and the principal. In addition to the requirements necessary for graduation, a variety of 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 important task.

The State of New Hampshire and the local School Board require that certain courses be passed in order 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 guidance director on an individual basis at any time.

## **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.

## **GUIDANCE MESSAGE**

The selection of courses for the next school year is a very important task. I encourage students and parents to spend time studying the Program of Studies so they will understand school and state requirements and be able to 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 is helpful in making good choices when selecting courses. Again, I encourage parents and students to think about what career clusters are of interest based on the students'

strengths, academic successes, and interests. Planning then helps these dreams become realities. Planning should include post-high school possibilities and making sure 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 Schools is also developing partnerships with local businesses to create work-study programs for students. If you have a request that does not appear in our Program of Studies, make an appointment to see me.

Investing time and thought to plan 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.

Melissa Leo, Lisbon Regional High School Counselor

## **GRADUATION REQUIREMENTS**

In order to qualify for a Lisbon Regional High School diploma, each graduate shall successfully complete at least 27 1/4 credits selected from the school's program of studies. Students also must complete performance-based graduation requirements.

The courses students must successfully complete are as follows:

Arts Education	1/2 Credit
Information & Computer Technologies/or Digital Portfolio	1/2 Credit
English/Language Arts	4 Credits
Mathematics	4 Credits (Includes Math 1-3)
Science (including one credit of physical science; one unit of biological science)	3 Credits
Social Studies (1 credit of US and New Hampshire history; 1 credit of world history; 1 credit of civics; 1/2 credit economics)	3 ½ Credits
Physical Education	1 Credit
Health Education	1/2 Credit
Occupational Preparation	1/2 Credit
Foreign Language (middle school)	1 Credit
Sophomore Project	1/4 Credit
Senior Project	1/2 Credit
Speech	1/2 Credit
Open electives (Must be selected from the LRHS program of studies)	7.5 Credits

**TOTAL 27 1/4 CREDITS**

It is recommended that students take one on-line course during their high school career. The online course must not be courseware. To receive credit in any subject, a student must meet 100% of the course competencies. A required subject which is failed must be made up before credit is granted.

Courses may be made up by repeating the course the following year, by attending an approved accredited summer school, by taking an approved home study course, or online classes.

## **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 important 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 work force. 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 an in-depth preparation in English, social studies, mathematics, science, and foreign language will be necessary.

We have arranged a regular transportation schedule so our students can take advantage of Career and Technical programs. Career and Technical courses are offered at Littleton High School. These classes provide training in such areas as building technology, automobile technology, international finance, teacher education, bike technology, computer technology, allied health technology and video production. This requires special scheduling. Careful planning may make it possible to prepare for further education in a vocational-technical college or a specialized training school program if this is your goal.

## **SUGGESTED CAREER EXPLORATORY PROGRAM**

### **GRADE 9**

English 9  
Int. Math 1  
Physical Science/Earth Science  
Spanish 1  
World History  
Health  
Occupational Preparation  
Elective

### **GRADE 10**

English 10  
Int. Math 2  
Biology  
Civics  
Economics  
Sophomore Project  
Elective  
Speech

### **GRADES 11**

English 11  
Int. Math 3  
Science (3rd)  
Art  
US History  
Electives  
CTE Class

### **GRADE 12**

English 12  
Senior Math/Statistics  
Senior Project  
CTE Classes  
Open electives

## **SUGGESTED COLLEGE PREPARATORY PROGRAM**

### **GRADE 9**

English 9  
Int. Math 1  
Physical Science  
Foreign Language  
Physical Education  
World History  
Occupational Preparation  
Health  
Electives

### **GRADE 10**

English 10  
Int. Math 2  
Biology  
Foreign Language  
Civics/Economics  
Electives  
Sophomore Project  
Speech

### **GRADE 11**

English 11  
Int. Math 3  
Chemistry/Physics  
Advanced Biology  
Foreign Language  
US History  
Elective

### **GRADE 12**

English 12  
Pre-Calculus  
Calculus  
Chemistry/Physics  
Art  
Senior Project  
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

### 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 a variety of techniques and art mediums. The following courses are offered on a rotating basis:

#### **Drawing and Painting** (Credit 1) **Semester 1**

This class will combine both drawing and painting. We will begin by learning the basics of drawing using lots of different drawing materials and techniques. Next we will use those skills to create images for the paintings. Acrylic, watercolor and tempera are 3 basic materials that you will learn to use while exploring your painting style. You will learn the basics of color theory and how to manipulate the paint for a variety of effects. We will paint 3D objects as well as on traditional canvas and paper.

#### **Ceramics** (Credit 1) **Semester 1**

Learn to use the pottery wheel! Students in this class will make a large variety of 3D clay pieces both hand-built and ones created on the pottery wheel. Students will develop their skills in pinch, coil and slab techniques and wheel thrown forms. Students will make clay sculptures and learn a variety of glaze techniques.

#### **Digital Photography** (Credit .50) **Semester 1**

Learn to see differently through the lens of a camera. This class teaches students how to compose images with the camera to create dynamic photographs. Students will learn to tell their own and others stories with pictures. Students will explore the early days of photography and learn about today's working photographers and how they shape our view of the world.

#### **Color and Design** (Credit .50) **Semester 1**

Color and Design combines the best of a number of other classes. Students will learn a number of skills such as photography, drawing, painting, print-making, and sculpture. Students will create both 2D and 3D work as they solve real world design problems. We will explore how others have come up with innovative designs that have addressed issues all over the world.

#### **Sculpture** (Credit 1) **Semester 2**

We live in a 3D world and sculpture is one of the oldest art forms. Students will learn about a variety of sculptural techniques while building 3D art in this class. We will be using a variety of materials such as paper, clay, plaster, cardboard, paint and found materials to create the sculpture. Students will gain an understanding of how sculpture has changed over time and how contemporary artists are using materials to create their work.

#### **Art Studio** (Credit 1) **Semester 2**

Are you not sure what kind of art you like best? Or do you like every kind of art? This class gives the student an opportunity to be creative in lots of different mediums. Students will make a ceramic project, a painting, print on a T-Shirt, create a sculpture, make a drawing, and more.

# **MUSIC**

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

## **High School Band** (Credit .50)

Students will have the opportunity to work together in an ensemble setting with the goal being two concerts a year. Students will be exposed to various genres of music, music theory and instrumental technique. High School Band is an opportunity for students who have played in Middle School Band to continue their instrumental studies and to push their musicianship to a higher level. Participation in Solo Festival, North Country Festival and All-State Auditions is only possible for students who participate in High School Band. In order to become a member of the High School Band students must have previous experience in the Middle School Band program.

## **Beginner High School Band** (Credit .50)

Are you new to playing an instrument? It is not too late to learn and you have a great opportunity to work in a small group, or one on one setting, with the instrument of your choice!

## **High School Chorus** (Credit .50)

This course is available to any student who wishes to sing in a vocal ensemble. Students study basic vocal technique using proper posture, breath support, and demonstrate ability to sight-sing simple vocal exercises. Literature selected each year is geared to the level of the students in the ensemble and represents various styles. The focus is to introduce students to some traditional vocal works, multi-cultural compositions and more contemporary vocal works. Students perform at several concerts and music festivals throughout the year. Participation in Solo Festival, North Country Festival and All-State Auditions is only possible for students who participate in High School Chorus. NO PREVIOUS MUSICAL EXPERIENCE IS NECESSARY.

## **Music Theory** (Credit .50)

Every musician needs to learn the basics of music theory. Note reading, intervals, scales and much more are addressed as well as learning how music works, allowing you to enjoy music more.

## **Guitar** (Credit .50)

This introductory guitar class will teach students how to read and play all notes and over a dozen basic chords in first position, read, play, and identify barre and power chords in all keys, learn basic tablature and bass technique, as well as play with proper classical technique.

In addition to playing the guitar, students will learn basic guitar maintenance and repair, including changing the strings and tuning.

## **Film Music** (Credit .50)

Film music is a survey of movie soundtracks from the days of silent films all the way to the present. We will watch films, then analyze and discuss the music. By the end of the semester, students will be able to score their own short film.



### **World Drumming** (Credit .50)

Learning about drumming around the world! Include how to read rhythms and improvisation and become a percussionist. We will also use everyday items to create music.

## **BUSINESS EDUCATION**

### **Law for Personal and Business Use** (Credit 1)

This course will concentrate on how personal law impacts not only businesses, but the lives of young people and adults as well. Students will learn how to read case citations of actual cases. We will also discuss how to analyze legal and ethical situations. This course will also discuss real-world cases and how to give legal advice to those in need. The class will also visit the courthouse to witness actual cases at the end of the course.

### **Accounting** (Credit 1)

The first year course is designed to provide the skill 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 business. A study of accounting involves an understanding of the basic principles of double-entry bookkeeping as they apply to the financial records, such as income statements, balance sheets, tax reports and other statements.

### **Economics** (Credit .50)

Students will learn about the important roles they play and the responsibilities they have as workers, as consumers, and as citizens. Students will see the financial relationship and impact each of these roles play in a community, a business, a state, and a nation. Discussion, reading, projects, and class activities are designed to teach students how society chooses among scarce resources to satisfy its needs and wants.

### **Occupational Preparation** (Credit .50)

This course helps teens discover the qualities that make them unique and how to use these talents to develop successful careers. Students will look at what kind of lifestyle they hope to attain and determine if their chosen careers will support that lifestyle. Adolescents have to make wise decisions about the future and therefore have to give some serious thought to their own values, abilities and desires. Required of all Freshmen.

### **Introduction to Business** (Credit 1)

Students will be introduced to the most current practices of business ownership and management. They will learn the skills necessary to manage a business in all aspects, including assessing consumer needs and wants, the sale of products or services, business ethics, marketing, advertising, human resources, and financial management.

### **Senior Seminar** (Credit 1)

Senior seminar is a class offered to seniors to help prepare them for postsecondary education, military or joining the workforce. Students will participate in exploring careers, researching and matching colleges, writing resumes, improving interviewing skills, writing college and work applications, college application essays, financial aid forms and applying for scholarships. Students

will also learn personal finance.

This course is great for any senior that plans to go to college or join the military after graduation. Local employers will also join the class to explain what they expect in their employees.

## **DRIVER EDUCATION**

This course will incorporate both the theoretical approach (classroom) and the practical approach (ten hours driving instruction) in the proper and safe operation of an automobile. Special emphasis is placed on the role of the automobile and traffic safety in general. The course will be limited to twenty students. Should more than twenty students select Driver Education, acceptance for the program will be on the basis of age. The oldest eligible students will be given the first opportunity. Prerequisite: Must be sixteen years old at the completion of the course and have parental approval. Cost of the class is \$400.00. Sessions are held after school hours.

## **ENGLISH**

### **Advanced Writing** (Credit 1)

This elective offered by the English department is essentially a reading and writing course in which students use short works of fiction and nonfiction to establish how, through the ages, man has attempted to understand his world. Aside from learning from reading classic short works and studying writings about and by philosophers, the students learn from doing their own extensive and detailed writing. Grammar skills and other basic communication skills are stressed as the various works are studied. This course is recommended for those students who want to strengthen their writing, reading, problem-solving, and oral communication skills so that they are better equipped for college, the armed services, or work. The writing aspect of the course is designed for those students who want to make their writing sharper in all aspects: style, grammar, mechanics, and form. It stresses the individual as writer/creator. Both expository and non-expository writing forms are studied and practiced. Students write daily and critique each other's work. There is much interaction in the class, and cooperative learning skills are integral. The students learn to recognize good writing by being exposed to examples of it. They write poetry and prose.

### **Freshman English** (Credit 1)

**(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. There are extensive writing assignments which include the narrative, explanatory and information writing, and the argument, as well as creative fiction and poetry work. There will be a wide range of reading approaches used, with emphasis on understanding and analytical skills. The thematic approach to literature focuses on the themes of family and caretaking; this provides the students with writing topics which relate to both the works studied and their own experiences.

### **British Literature** (Credit 1)

**(Required)**

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 as

well as literary themes through reading, a variety of writing approaches that include the narrative, explanatory and information writing, the 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 the ways in which ideas can be communicated and connected to our world today.

### **Junior College Composition**

(Credit 1) (can be taken for college credits)

Students learn the fundamentals of a variety of forms of academic writing and discourse by engaging in scholarly research using documentation in both MLA and APA formats, literary analysis, oral presentation styles, and formal and informal types of personal writing. Additionally, students will read a variety of texts, including nonfiction essays, novels, short stories, and poems. There will be required films and/or online sources used for class as well.

### **Senior American Literature**

(Credit 1) (can be taken for college credits)

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 be considered to 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), as well as for 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 personal insights to the works studied and various aspects of current American culture. Literary genres covered include the novel, the short story, the poem, the autobiography, and the essay. Informational texts and selected films will also be studied. as they enrich and connect to the literature being studied.

### **Speech & Research** (Credit 1)

**(Required)**

Speech and Research is a required semester-long course designed to prepare students for in-depth research and presentation. Students will learn how 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 learn the fundamentals of communication and develop skills in the preparation, organization and presentation of speeches.

### **Composition, Film, and Literature I and II**, open to grades 11-12 (Credit 1)

This course focuses on writing, film and literature study, vocabulary, oral presentation, and the study of informational texts. Writing assignments include narrative writing, explanatory writing, informational writing, and the argument, as well as creative fiction and poetry work. There is a wide range of reading approaches used, with an emphasis on demonstrating understanding and analytical skills.

The course uses a thematic approach to literature that provides students with writing topics which relate to both the works studied and their own experiences.

Students study short stories, novels, poetry, plays, nonfiction texts, and films. Writing assignments are connected to the literature and are personal responses to and more formal analyses of the works under consideration. Students engage in shorter research projects that require the use of scholarly articles and annotation skills and that may include a brief oral presentation (formal and/or informal).

This course is able to be taken twice for credit, as the works studied will vary each semester.

## **FAMILY AND CONSUMER SCIENCE**

### **Culinary Arts** (Credit 1)

Culinary Arts is an elective course for high school that teaches students the basics of how to cook, bake, and read recipes. We also cover nutrition, menu planning, careers in the food industry, table etiquette, savvy food buying and budgeting.

### **Food Science** (Credit 1)

This fulfills Science course requirements. Food is studied from a science perspective, chemistry, biology, physics and psychology. Labs are conducted from a science perspective, most of them are not edible labs. Students interested in Culinary Arts careers will benefit from the information presented in this course. This course is a solid introduction to high school level courses in biology and chemistry.

### **Growth & Development** (Credit 1)

There is a set of principles that 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.

### **Community, Career and Family Relations** (Credit 1)

Exploration and understanding of social, emotional, cognitive and physical development of individuals from infancy through old age in the context of family will be studied. This course also will examine the diverse families in the United States with emphasis on issues of race, ethnicity, class and gender and we will focus on the effects of demographic, historical and social changes.

### **Foods, Nutrition and Wellness** (Credit 1)

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. We will explore the impacts of science and technology on nutrition and career paths available. Cooking is also part of your learning experience.

### **Parenting in the 21<sup>st</sup> Century** (Credit 1) VHS Online

Whether you are currently a parent or a parent-to-be, it is quite likely that at some time in the future you will be faced with the reality of having children. Unlike so many other important situations in life, most of us are not particularly well prepared for this crucial role. "Parenting in the 21<sup>st</sup> Century" helps you begin the lifelong process of learning about child development and parenting as well as explore available community resources for parenting in the contemporary world.

## **WORLD LANGUAGE**

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

### **Spanish 1** (Credit 1)

The emphasis in this course is on communication. The proficiency-based approach is used to help students build the four basic skills: listening, speaking, reading and writing. This course also aims to increase the students' knowledge and appreciation of diverse cultures of Spanish-speaking countries.

### **Spanish 2** (Credit 1) Prerequisite: Spanish 1

Students continue from the point at which they ended in Spanish 1. The proficiency-based approach is used with an emphasis on communication. The course also aims to increase the students' knowledge and appreciation of the diverse cultures of Spanish-speaking countries.

### **Spanish 3 & 4** (Credit 1)

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 to be on the 5 C's – communication, cultures, connections, comparisons and communities.

## **HEALTH**

### **Health** (Credit .50)

**(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, and family life. Students participate in the American Red Cross Standard First Aid Course, certification available upon satisfactory completion. Open to grades 9-12

## **PHYSICAL EDUCATION**

### **Physical Education** (Credit 1)

**(Required)**

Physical education is a part of the school curriculum which aims to develop the student through physical activity as well as 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. Students need one credit for graduation. 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** (Credit 1)

This class provides an introduction to the sociology of sports and encourages students to ask questions and think critically about sports as parts of social life. The emphasis is on sports and sport-related behaviors as they occur in social and cultural related contexts.

## **MATHEMATICS**

At Lisbon Regional School, we offer an integrated mathematics curriculum for high school students. We have chosen *Core-Plus Mathematics Project*, which is one of the National Science Foundation (NSF) supported curricula and is 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 with a focus 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 ability, 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 who are 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. In order to complete all courses in this sequence, students must take more than one course in their senior year. Students who are interested in a two-year vocational/technical degree or immediately entering the workforce may choose sequence B. All students are encouraged to take any of the other mathematics electives offered (which vary from year to year) 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 are not allowed to 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 normal credit-earning courses.

	<b><u>A</u></b>	<b><u>B</u></b>
Grade 9	Integrated Math 1	Integrated Math 1
Grade 10	Integrated Math 2	Integrated Math 2
Grade 11	Integrated Math 3 & Statistics	Integrated Math 3
Grade 12	Pre-Calculus & Calculus	Statistics & Senior Math

**Integrated Mathematics 1, 2, & 3** (Credit 1 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**

Patterns of Change  
Patterns in Data  
Linear Functions  
Exponential Functions  
Patterns in Shape  
Quadratic Functions  
Patterns in Chance

#### **Integrated Mathematics 2**

Functions, Equations & Systems  
Matrix Methods  
Coordinate Methods  
Regression & Correlation  
Non-Linear Functions & Equations  
Trigonometric Methods  
Probability Distributions

#### **Integrated Mathematics 3**

Reasoning & Proof  
Inequalities & Linear Programming  
Similarity & Congruence  
Samples & Variation  
Polynomial & Rational Functions  
Circles & Circular Functions  
Recursion and Iteration  
Inverse Functions

#### **Senior Math** (Credit 1.0)

This course is for any student who has completed Math 1, 2, and 3. It is a fourth level mathematics course designed for seniors that are looking to continue to study 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 amount of materials to carpet floors in a house, paint walls, shingle roofs, 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 depreciation 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.

#### **Statistics** (Credit 1) (Running Start - 4 credits)

This course is for any student who has completed Math 1 and Math 2, Math 3 may be concurrent. Statistics is the mathematics of collecting, organizing, and analyzing numeric data for the purpose of making inferences or predictions. It is, by nature, a much applied area of mathematics that is used in nearly every professional job as well in everyday life. Topics studied will include (but 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.

#### **Pre-Calculus** (Credit 1) (Running Start - 4 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. Emphasis in this course is placed on 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, polynomial, rational and exponential functions, polynomial inequalities, operations on functions, translating functions, and logarithms. Prerequisites: Integrated Math 1, 2, & 3 or their equivalents.

### **Calculus** (Credit 1) (Running Start - 4 credits)

This course focuses on describing the way that 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 emphasizes the conceptual understanding of the mathematical topics studied while building procedural fluency. Prerequisite: Pre-Calculus.

## **SCIENCE**

### **Earth & Space Science A** (Credit 1) VHS Online

This is the first of two courses that comprise Earth Science. This course is designed to prepare the student to confidently enter and complete college level earth science courses. The Prentice Hall text, Earth Science, provides the basis for the course content. This course consists of a varied curriculum that provides the student the opportunity to explore, compare, research, reflect, and make real-world connections. The student will engage in hands-on explorations and virtual simulations, which will enhance traditional lesson formats. The student will identify the branches of earth science, locate geographic features on topographic maps, conduct hands-on experiments with minerals and rocks, compare and contrast weathering and erosion, explore plate tectonics with relation to earthquakes and volcanoes, and investigate the formation of mountains.

### **Earth & Space Science B** (Credit 1) VHS Online

This is the second of two courses that comprise Earth Science. During this course the student will explore Earth's history by studying fossils and rock layers; investigate oceanic productivity and features on the seafloor; learn about atmospheric processes, including the water cycle; infer how severe storms form; study the earth-moon-sun relationship; and explore other celestial bodies, such as stars.

### **Physical Science** (Credit 1)

**(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 9<sup>th</sup> graders.

### **Biology** (Credit 1)

**(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 10<sup>th</sup> graders.

### **Anatomy and Physiology** (Credit 1) (Running Start - 4 credits)

Anatomy and Physiology focuses on the human body. Concepts include cells and tissues, organs and organs systems, and the chemical functioning of the body. Students must have completed 10<sup>th</sup> grade biology prior to enrolling in Anatomy. This course can be taken for 4 Running Start credits. Students who are interested in careers in the health field are encouraged to enroll in Anatomy.

### **Chemistry** (Credit 1)

Chemistry is the study of matter and its interactions. Topics include atomic structure, bonding and



chemical reactions, atomic structure, gas laws, solution chemistry, acids and bases, and an introduction to organic chemistry. Lab experiences include both demonstrations and hands-on labs. Chemistry is offered on both the general and honors levels.

**Environmental Science** (Credit 1) (Running Start - 4 credits)

Upon completing this course, students will be able to identify basic ecological principles (energy flow, ecosystem structure, resource use), be able to list and describe Earth's major terrestrial and aquatic biomes, and make connections to local natural resources. This course can be taken for 4 college credits through the Running Start program.

**Physics** (Credit 1) Prerequisite: Math 3, Biology.

This is a study of the physical world with emphasis on energy interrelationships in the following areas: mechanics, light, heat, sound, and electricity nucleonics. It is designed to acquaint students with different forms of energy and relationships and the solutions of the problems involved. Basics: mass-energy relationships, measurements, tools, mechanics, machines, MA, accelerated motion, gravitation, kinetic energy, liquids and gasses.

**Advanced Biology** (Credit 1) (Running Start - 4 credits)

Advanced Biology offers a more indepth 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.

**Forensics** (Credit 1)(Prerequisite: Physical Science and Biology)

This course will be a laboratory and case-study based class on how forensic scientists collect and process evidence that is 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.

## **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. All of these issues must be examined, re-examined, and studied in its historical context to develop citizens who are informed, involved, and equipped to be a citizen.

**Course Offerings:**

**United States History** (Credit-1)

**(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 being defined by confrontation and division, students will learn to cultivate historical thinking habits—to gain historical knowledge, critically evaluate historical evidence, and produce an authentic argument.

**World History and Geography** (Credit-1)

**(Required)**

The focus of this survey course is the study of the historical development of people, places, and patterns of life from approximately 8,000 BCE to present. Students will develop historical skills and geographical analysis to explore human history. Students will analyze the interaction between geography and the development of civilization(s).

**Civics/United States Government (Credit-1)**

**(Required)**

This course analyzes the various institutions, groups, beliefs, and ideas that constitute 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 level; 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.

**Social Studies Electives**

**(Second Semester Only Every fourth Year)**

**Contemporary World Issues & the Middle East (Credit-1)**

This thought-provoking course asks students to analyze governments, economies, peoples, and cultures from around the world. The course emphasizes the structures and policies of the United States and how they compare to other systems in the international community. Students will evaluate issues including human rights, the strengths and weaknesses of globalization, America's role in the international economy, the severe environmental threats facing many regions around the world today, how religion is often used to facilitate and justify violence, and America's "War on Terror" and its impact on the Middle East and the Islamic culture.

**African American History (Credit-1)**

This course studies the continent of Africa and its Diasporas in Europe, Asia and the Americas, with special emphasis on the African-American and African-Caribbean experience. This course incorporates race, class, gender, and cultural analysis into nation-building and globalization. Students will examine a variety of primary sources to understand the struggle for self-determination, equality, respect and civil rights of minority people everywhere.

**World Religions (Credit-1)**

This is a survey course that introduces students to the major world religions. Students explore how various religious beliefs have shaped history. Students will analyze how various practices and rituals continue to influence today's events. Although we study various major religions of the world in terms of its theology--views of God, self, society, purposes of life, traditions, and rituals, we also analyze the development of religious offshoots and movements.

**DISTANCE LEARNING EDUCATION PROGRAM**

The Distance Learning Program provides students with additional quality educational opportunities. Through accredited online schools and Edgenuity courseware, students are given unlimited opportunities to advance their studies in a 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. Students not only benefit from the content and technical aspects of an online course, students benefit from participating in a global classroom. Available courses include all academic levels: *Pre-Advanced Placement, Advanced Placement, Honors, Dual Credit (college level), Standard, and Competency Recovery*. By expanding learning opportunities for our students, students can also improve their chances of obtaining college scholarships, while advancing in their college program.

Online courses are flexible, so students can schedule their course anytime during their regular school day. Students can also work on their online course from home, during vacations and holidays, or from any location that has Internet availability. In addition to a full schedule of traditional courses, some students can even add an online course to increase the rigor of their academic portfolio or to fulfill an interest in a specific content area. Online courses are chosen by the student, and then approved by the high school guidance counselor. A student can be enrolled in one or more of the following online schools or courseware: Virtual Learning Academy Charter School (vlacs.org), Virtual High School (thevhscollaborative.org), Community College System of New Hampshire (CCSNH.edu), and Edgenuity courseware.

**Distance Learning course opportunities include courses which allow students to:**

- *Earn college credit while earning high school credit*
  - *Virtual Learning Academy Charter School's e-Start program with the Community College System of NH and Southern NH University*
  - *Earn an Associate's Degree in Liberal Arts from SNHU while still in high school. This can be accomplished with a combination of traditional courses and online courses.*
  - *Several New Hampshire colleges and universities offer accelerated and early college programs. Please check with the guidance counselor for more information.*
- *Meet graduation requirements*
- *Recover high school competencies*
- *Enrich knowledge and skills*
- *Explore and learn new content*
- *Enhance career pathways*
- *Prepare for post-secondary education and the workforce*
- *Advance learning*
- *Build time management skills*
- *Experience student directed and student centered learning*

All online schools have highly qualified and certified teachers or professors who students work with. The Edgenuity courseware program is a self-paced, student-directed courseware created by educational specialists and facilitated by a teacher. An educator, who is certified as a Distance Learning Coordinator, Library Media Specialist, and Digital Learning Specialist is staffed in the Distance Learning classroom, which can now be found in the school's Library Media Center.

To learn more about the Distance Learning Program, and to see a list of course options, please see Ms. Leo or Mrs. Bruce.

## **TECHNOLOGY EDUCATION**

### **Photo Shop** (Credit .50)

Photoshop allows you to digitally manipulate existing images as well as create new content. Students will learn how to use filters and apply different special effects to whole images or specific elements. By the end of the course, you'll be able to 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.

### **Robotics** (Credit .50)

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 that wants to compete in one of the regional competitions will have that opportunity.

### **Internship** (Credit 1)

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 receive credit for successful participation in the program. Student internships are available in a number of different locations and job types.

Though 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 think about possible careers and education for the future.
- Develop entry level job skills.
- Develop responsibility and maturity necessary for functioning in the workplace.
- Earn academic credit for work-place 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

Students who are interested should see Ms. Leo or Mr. McKeever.

### **Career Education (Teacher Assistant Internship)** (Credit 1)

This individualized instruction program utilizes the talents of qualified students to enrich the curriculum of elementary school children and to 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. 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 check-list evaluation of the tutor is submitted by the classroom teacher to the coordinator.

## **INFORMATION TECHNOLOGY**

**Computer Literacy** (Credit .50) required for graduation. (May be fulfilled through VHS, VLACS or Digital Portfolio)

Designed to meet the state requirement for graduation, computer literacy offers students the opportunity to learn word processing, spreadsheets, databases, graphing, PowerPoint, web page design, and integrated software.

**Computer Science Honors** (Credit 1) Fulfills ICT Requirement

This course is an introduction to computer science, covering the basic concepts and elements of the Java programming language and introducing object-oriented programming. Students will gain experience writing programs that are well documented according to industry standards and will have the opportunity to create Java Applets and learn about Graphical User Interface programming with Swing. Additionally, the students will be encouraged to work both independently and collaboratively to solve practical problems that illustrate application-building techniques.

This course is intended to teach and reinforce crucial academic skills to help students strengthen their background in computer science prior to taking an Advanced Placement course.

**Computer Networking Grade 11** (Credit 2) Fulfills ICT Requirement

The first year of this program prepares students for a career in computer networking. This course will provide students with classroom and laboratory experience in current and emerging network terminology and protocols, network standards, LANs, WANs, OSI Model, cabling, cabling tools, routers, router programming, star topologies, IP addressing and the network administrator's role and function. The course is being taught using the Cisco Systems Networking Academy Curriculum.

**Computer Networking Grade 12** (Credit 2) Fulfills ICT Requirement

This course is a continuation of Computer Networking Grade 11, covering IP Version 6, LAN design with bridges, routers and switches, Fast Ethernet, Spanning Tree Protocol, Virtual LANs and LAN Trunking. The topic of wireless broadband is also covered. Extended coverage of WAN, Frame Relay, ISDN, PPP, HDLC and DDR will also be covered. The course also covers advanced features of Packet Tracer. The course is taught using the Cisco Systems Networking Academy Curriculum: Cisco Exploration LAN Switching and Wireless and Accessing the WAN.

**Digital Portfolio** (Credit .50) Fulfills ICT Requirement

Students may develop a digital portfolio demonstrating 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

**Fundamentals of Computer Systems** (Credit .50) Fulfills ICT Requirement

This course will provide students with an understanding of computers and how they operate as well as a basic understanding of how to manage and maintain computers and computer systems. These skills will provide students with the ability to configure computers and solve computer problems.

Students will learn details about the different elements of computers and computer systems. They will learn to identify hardware devices and their functions. They will be instructed on the role of operating systems as well as how to install and customize the Windows operating system. Students will learn about networking and the Internet. They will also be introduced to security issues in order to protect themselves and their computers and data.

Students will also learn about some of the software applications typically used on computers today, such as Microsoft Office. In addition, students will learn specifics about maintaining and troubleshooting computers, including managing files, backing up systems, and using the administrative tools in the Windows operating system. Lastly, the students will learn the basics of customer service and working as a help desk support technician.

**Introduction to Information Technology** (Credit .50) Fulfills ICT Requirement

In this course, we introduce students to the knowledge base and technical skills that will help them to successfully compete for jobs within the Information Technology Career Cluster. Lessons are structured so that students learn and then demonstrate not only critical assessment and analytic skills, but also interpersonal skills that are valued so highly among IT employers.

We explore a range of career tracks that include network engineers, application/programming developers, and systems analysts. These career paths are described in depth, discussing typical job responsibilities, educational and licensure requirements, working conditions, and job outlooks.

Our lessons help students place the evolution of technology and job opportunities in context so that they will understand their important role in furthering its development. We believe that the most successful IT professionals combine technical know-how with leadership ability. To this end, students learn that their acquired expertise comes with the responsibility to represent themselves and the companies they work for within the highest legal and ethical standards.

## **SPECIAL EDUCATION INCLUSION PROGRAM**

The Special Education Room for grades seven through twelve provides the following services.

1. Individualized educational plans for educationally handicapped students who qualify under PL 94-142.
2. Individualized instruction and group instruction for identified students in language arts and math, and other subject areas as needed.
3. Back-up and consultation support for classroom teachers who need subject assistance in making instructional and programming modifications for mainstreamed students.
4. Behavioral contracts and conflict-resolution instruction.
5. Life Skills program to include:
  - a. Basic health and nutrition
  - b. Cooking
  - c. Banking
  - d. Using community resources
  - e. Recreation and leisure activities
  - f. Independent living skills
6. Transition planning for identified seniors.
7. Monitor students' progress in mainstream classes.
8. Academic testing services for referred students and triennial reviews.



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

### **PROGRAM OF STUDIES**

The mission of the 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 also 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 at 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 have the opportunity to also earn college credit.

Programs offered at the Center include:

- Accounting
- Automotive Technology
- Broadcast Technology/Technology Ed
- Computer Systems Technology
- Construction Technology
- Essentials of Finance/Global Commerce
- Fire Science
- Health Science Technologies
- Teacher Education
- Technology/Engineering
- Work Site Learning/Student Services

Post-Secondary Agreements:

Faculty members have worked hard to align their courses with post-secondary programs and as a



result of their efforts, students have the option of earning college credit for their work in each CTE program. Credits are fully transferable to other two or four-year institutions.

- Accounting: 3 credits Accounting I (White Mountains Community College)
- Automotive Technology: 3 credits Introduction to Automotive Technology (White Mountains Community College, Central Maine Community College)
- Construction Technology: 3 credits exempted Construction Management Program(Southern New Hampshire University)
- Computer Technology: 3 credits IT Essentials (White Mountains Community College)
- Essentials of Finance/Global Commerce: 3 exempted (Southern New Hampshire University)
- Health Science Technology: 3 credits each: Medical Terminology (White Mountains Community College) and Exercise Science (Manchester Community College)
- Teacher/Education: 3 credits Foundations of Early Childhood, Health Safety and Nutrition, Infant and Toddler Curriculum (White Mountains Community College)
- Pre-Engineering/Engineering-Project Lead the Way (numerous colleges)

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 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 a two-year course of study, designed for juniors and seniors and follow the state and nationally approved curriculum and competencies. Early withdrawal from a CTE program could result in 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 CTSSO which is affiliated with each program in the CTE center. Members of the CTSSO will have the opportunity to engage in state and national competitions as well as local community service projects throughout the school year.

**~ THE FOLLOWING COURSES ARE FOR JUNIORS AND SENIORS ONLY ~**

## **AUTOMOTIVE TECHNOLOGIES**

### **AUTOMOTIVE TECHNOLOGY I (2 Semesters - 2 Credits) Grade 11**

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 9 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 (2 semesters – 2 credits) Grade 12, Prerequisite: Auto 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 Skills USA, 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**

## **BUILDING CONSTRUCTION TECHNOLOGIES**

### **BUILDING CONSTRUCTION TECHNOLOGY I (2 semesters – 2 credits)**

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 jobsite, identifying and using tools safely, design and construction of floor systems, framing walls, and roof systems. In our 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 will have the opportunity to complete their OSHA Ten Hour Safety Certification online.

### **BUILDING CONSTRUCTION TECHNOLOGY II**

#### **(2 semesters – 2 Credits) 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 & MARKETING**

### **BUSINESS ESSENTIALS (2 semesters – 2 credits)**

Students will be introduced to a variety of careers and activities within the business community. Students will gain an understanding of the role of business in society, which may help them decide a possible career path or area of interest for the future. This course will also focus on personal business issues dealing with such topics as consumerism, money management, banking, investing, insurance, ethical/responsible practices, business law, human resource management, checking/savings/credit, business communication, marketing research, product research, and product development. Business Essentials 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 BUSINESS & MARKETING (2 semesters – 2 credits) Prerequisite: Business Essentials**

“Awesome, educational, interesting, phenomenal” just some of the words students use to describe this course. Global Business & Marketing is the second year of the two year business program. In

year one, students learned the fundamentals of business and doing business within the United States. In global business the focus of the first semester will be on operating businesses outside of the United States. Expanding abroad creates certain challenges for domestic companies both small and large. Diverse cultures, laws, languages, and currencies add to the mix of challenges. This course will help students understand the different aspects of international business. The focus of semester two will be an introduction to marketing. A wide variety of marketing topics will be introduced including how marketing affects all of us, the marketing plan, selling, promotion, distribution, pricing and career development. The main tools used to discover and analyze these areas will include class discussions, readings, videos, case studies, articles, and company tours. Area business relationships have been established to help in the learning process. The course is designed for those students who have an interest in pursuing a career in international business and marketing as well as those who seek to broaden their knowledge in the business field. **CTSO Affiliate: FBLA**

## COMPUTER SYSTEMS TECHNOLOGIES

### COMPUTER SYSTEMS TECHNOLOGY I



**(2 semesters – 2 credits) Prerequisites: Algebra I & Computer Literacy**

The Computer Systems Technology Program prepares students to enter a career in computer support as part of an Information Technology team. Students will learn how to diagnose and solve computer problems, upgrade computer systems, properly install computer components, and maintain computers in a Windows or network environment. Students gain necessary skills to become support/service/bench or helpdesk technicians. This program prepares students to take national exams which can earn them professional industry certifications such as the A+ (Computer Service Technician) often required by Information Technology support staff. **CTSO Affiliate: Skills USA**

### COMPUTER SYSTEMS TECHNOLOGY II



**(2 semesters – 2 credits) Prerequisite: Computer Systems Technology I**

Students will develop an understanding of Computer Network Basics, including Binary and Hexadecimal Number Systems, Basic Networking Terminology, and Internetworking Concepts; Identifying the Major Components of a Network System, including Clients and Servers, Network Interface Cards (NICs), Internetworking Devices, Media, and Topologies; Describing the Functions, Operations, and Primary Components of Local Area Networks (LANs), Wide Area Networks (WANs), Metropolitan Area Networks (MANs), Storage Area Networks (SANs), Content Networks (CNs), and Virtual Private Networks (VPNs); Describing the Major Network Access Methods and Outlining the Key Features of Each; Describing the Functions and Operations of Switching Technologies; Explaining the Format and Significance of IP Addressing, Classes, Reserved Address Space, and Sub netting; Calculating Valid Subnetwork Addresses and Mask Values; Explaining the Purposes of Networking Addresses, Routing Protocols, and Routed Protocols; Describing the Functions, Operations, and Primary Components of Wan Technologies; Describing the Function, Operation, and Primary Components Required to Provide Remote Access Services; Designing or Modifying a simple Local Area Network (LAN) using Cisco Products; Managing System Image and Device Configuration Files; and Implementing Access Lists. **CTSO Affiliate: Skills USA**

## TEACHER EDUCATION

### TEACHER EDUCATION I



**(2 semesters – 2 credits)**

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 child development, environments, and experience all affect a child's learning. Students learn practical guidance and discipline techniques, lesson planning and teaching strategies used in the classroom. Students divide their time between classroom instruction and student-teaching in our on-site laboratory school, Little Leopards Learning Center. Teacher Education I units include Growth and Development, Observation and Assessment, Developmentally Appropriate Practices, Diversity, Theory and History of Education, Curriculum planning, and differentiated Instruction.

*College credit available: Foundations in Early Childhood Education (3 credits).*

**CTSO Affiliate: FEA (Future Educators Association)**

## **TEACHER EDUCATION II** **(2 semesters – 2 credits)**

**Prerequisite: Teacher Education I; Health Recommended**

Teacher Education II is a continuation of the Teacher 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. Students continue 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 continue to divide their time between classroom instruction and student teaching. Students are placed in local Elementary and Middle High Schools, or Early Childhood Centers where they work alongside a veteran teacher as a teacher's aide. 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 towards a degree in education. *College Credit available for Early Childhood: E-start credit available: Human Growth and Development (3 credits).* CTSO Affiliate: FEA (Future Educators Association) **CTSO Affiliate: FEA (Future Educators Association)**

## **HEALTH SCIENCE TECHNOLOGIES**

### **HEALTH SCIENCE TECHNOLOGY I** **(2 semesters – 2 credits) Prerequisite: Biology**

Health Science Technology is a new and exciting program for students interested in pursuing a health career or a career in the human service field. This two-year course of study, designed for juniors and seniors, follows a state and nationally approved curriculum and competencies. Students have 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 in the classroom, guest speakers, field trips and job shadowing. They study the body systems (anatomy & physiology), patient safety, medical ethics and medical law, medical terminology, patient safety, basic aspects of patient care, communication assessment, and leadership skills and become certified in CPR and First Aid. Students have the option of taking Medical Terminology as a 3 college credit Running Start course as part of the curriculum. Students have leadership and career development skills opportunities by participation in HOSA and competing at both state and national levels. **CTSO Affiliate: HOSA (Health Occupations Students of America)**

## **HEALTH SCIENCE TECHNOLOGY II** **(2 semesters – 2 credits)**

### **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. Part of the curriculum is 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 health care 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 (Health Occupations Students of America)**

## **DIGITAL VIDEO PRODUCTION**

### **DIGITAL VIDEO PRODUCTION I (2 semesters – 2 credits)**

The redesigned Digital Video Program (formerly Broadcast Technology) encompasses a variety of industry standard film and television roles. The focus of the program offers students a chance to work with cameras, audio mixing, studio lighting, green screen equipment, as well as graphics creation and video editing software. The first two semesters of the course are designed to give students a fundamental overview of the production industry, encouraging them to be active participants in various filming projects. Students will learn about planning during weekly production meetings, script writing, directing and filming, editing and post production, as well as sound and graphics creation. Using the state of the art broadcasting studio as a cornerstone of learning, students will edit live footage, utilize chroma key (green screen) technology, work with cameras and lighting setups, and produce a variety of short films, television segments, documentaries, and PSAs. Year one students will work with year two students as assistants on the year two short film projects. They will also be given the opportunity to shoot actual commercials for Channel 2 Patrons on an as needed basis, as well as film and live edit local events.

### **DIGITAL VIDEO PRODUCTION II (2 semesters – 2 credits) Pre-requisite for this class is Digital Video Production I**

During year two, students will work as independent filmmakers and will be required to manage and direct year one students during the creation and production of their own projects: news shows, documentaries, commercials, PSAs and other independent productions. They will work with actual customers, creating a production plan, budgeting time and money for commercials to be aired for channel 2 patrons. They will film local meetings and events for channel 2, go on location and do scouting/reporting for the year one news stories, and create short PSAs. Each of the student's independent projects will be put together into a digital portfolio that can be presented to a school as proof of their ability to write, edit, direct, create, and produce a wide range of digital video works. Completing this 2 year course, students will find that they are well prepared for a future education or work in any number of the fields that are encompassed within the "Digital Video" career path.

## **FIREFIGHTER SCIENCE**

### **FIRE SCIENCE I (2 semesters – 2 credits)**

The Hugh J Gallen Career and Technical Center is offering a new and exciting course in Firefighter I. This course is in collaboration with New Hampshire's Division of Fire Standards and Training and EMS. In year one of Fire Science you will be eligible for a pro-board certification from the NH Division of Fire Standards and Training and EMS. This certification is recognized in 37 states and several foreign countries. This is the first step in a firefighter's career. You must have the stamina and physical ability to work in untenable conditions for several consecutive 30-minute durations. Upon successful completion you will earn high school credit and possible college credit. This course has a traditional classroom setting with many hours of hands-on training with experienced and skilled firefighters and EMTs. You will experience basic firefighting skills and responsibilities, knowledge of Personal Protective, use and techniques of hose and nozzle handling, and knowledge of carrying and deploying ground ladders. These are just a few things that will be covered in this class.

### **EMERGENCY MEDICAL SERVICES (EMS) I (2 semesters – 2 credits)**

#### **Prerequisite: Fire Science I or Health Science Technologies I**

EMS – During the second year of the Fire Science Programing you will be offered the opportunity to take the State of NH Emergency Medical Technician program. This course will prepare you for meeting the state requirements in order to obtain your EMT Certification and National Registry License. This program will teach you how to prepare for and deal with emergency medical treatment, including medical emergencies, trauma resuscitation, pediatric, geriatric care and obstetrical patients, and much more. You will develop comprehensive teamwork skills, as well as techniques to deal with stressful situations. Your training will include the classroom and the state of the art health clinic as well as internships. We pride ourselves on offering specialized and focused professional development and look forward to helping you meet your goals in public service.

## **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 which otherwise might not have been possible. It is our hope that from this competition, Lisbon athletes will be able to develop positive attitudes and leadership skills that will be beneficial to 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 of desirable habits in health, sanitation and safety should be fostered.
3. Athletics will afford athletes an opportunity to make real friendships with their own squad members and lasting friendships with members of competitive teams.
4. Athletes will realize that athletic competition is a privilege that carries with it 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. In order for a boy or girl to compete in interscholastic athletics, he or she must comply completely with all regulations and requirements set forth by the NHIAA. The major state requirements are as follows:

1. May compete in athletics during the school year if his or her 20th birthday is after September 1, providing 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 responsibility of the school. (See NHIAA handbook exception.)
5. May compete if he/she has passed a physical examination by a doctor.