

# Program of Studies Updates

2023-2024



**ANDOVER  
HIGH SCHOOL**

PROGRAM OF STUDIES

2023 / 2024

# Merrimack College Program - Removed from POS

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Andover High School juniors and seniors who have shown to be capable of succeeding at college level work are eligible to take courses at Merrimack College on a tuition-free, space-available basis. Any other fees or costs are the responsibility of the student. Students interested in registering for fall semester classes should discuss this option with their counselor and review the course of studies and registration materials from Merrimack College during August.

Andover Public Schools participates in the Massachusetts State Seal of Biliteracy. The Seal of Biliteracy is for any student who demonstrates proficiency in English and any other language, whether they speak the non-English language at home or learned it at school or in the community.

The Digital Learning and Business department utilizes the International Society for Technology and Education (ISTE) competencies to provide Andover High School students the opportunity to develop their skills as learners, leaders, collaborators, designers, and facilitators. In the DL&B department, students “learn by doing” to create technology, business, and media products through interactive courses that engage learners through the use of project-based curricula. The goal of the department is to support students to be innovators through offering courses in the three strands of technology, business, and media. In addition to the ISTE digital competencies, the DL&B department uses the Massachusetts Digital Literacy and Computer Science (DLCS) standards and the National Standards for Business Education.

## International Society for Technology and Education (ISTE) Student Competencies

1. Computational Thinking (Learner)
2. Equity Leader (Leadership)
3. Collaborating Around Computing (Collaborator)
4. Creativity & Design (Designer)
5. Integrating Computational Thinking (Facilitator)

## Massachusetts Digital Literacy and Computer Science (DLCS) Skills

1. Creating
2. Connecting
3. Abstracting
4. Analyzing
5. Communicating
6. Collaborating
7. Researching

## National Standards for Business Education

- all students will participate in the economic system;
- all students will encounter a business environment that is characterized by diversity;
- all students will use technology as a tool;
- technology has accelerated the pace and frequency of change.

This course will provide students with the techniques and tools needed to start and operate their own business. The focus of this course will be to select a business, prepare a business plan and learn how to manage an ongoing business. Students will develop concepts and complete a business plan upon completion of this course. Students will also have the opportunity to join the DECA Business and Marketing Organization.

Students enrolled in this course have the opportunity to join the DECA Business and Marketing Organization. *(formerly known as Social Entrepreneurship)* Open to grades 9-12, and designed as an advanced course

## DL130 Intro to Business Finance .5 Credit

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This exploratory course provides an introduction to finance and accounting. Students will review revenue, profit, and loss. Students will learn how to record business transactions and prepare financial statements including income statements, balance sheets, and statements of cash flows. In addition, students will learn basic investing and how to determine the financial health of an organization. Students will also have the opportunity to join the DECA Business and Marketing Organization.

Prerequisite: Introduction to Business Course; This course is open to grades 10-12, and designed as an advanced course.

This Project-Based course introduces students to the development of web based projects using many third party platforms. In this course, students will create interactive, state-of-the-art, web-based applications that support the demands of tomorrow's e-business processes across different devices. Students will design web pages with user interface elements designed for Computers, Tablets, and Smartphones. Student learning will include investigations into the components of global business needs. We will also develop game design projects using Minecraft, Unity and other applications. Students will also have the opportunity to join the DECA Business and Marketing Organization. *(formerly known as UX Experience Design). Open to Grades 9-12. Designed as a foundational course*



Novel Imagineering explores a diverse collection of contemporary and canonical short fiction, non-fiction, and poetry through POV, theme, character development, plot structure, settings, and genre. As in other English courses offered at AHS, students will critically analyze the text, engage in problem-solving, make real-world connections and continue to hone their critical reading skills. Students will then demonstrate their deeper understanding in a variety of tangible ways that combine the English classroom and the Innovation Lab approaches. Specifically, each unit will offer students the unique challenge of bringing together traditional literary analysis and novel design building, through individual and small group activities, such as:

- Design and prototyping
- Book to film adaptation
- Cosplay interpretation
- Motion builds using mechanical and electronic devices with coding
- Exhibit curations using existing or created artifacts

Open to grades 10-12

# English Learner Education Program

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The English language education (ELE) program provides multilingual English learners a pathway to attain linguistic and communicative competence in English while facilitating access to content standards of the Massachusetts Curriculum Frameworks. The success of the ELE program relies on a culturally respectful school environment that supports multilingualism and respects students' cultural and linguistic funds of knowledge. ELE courses develop and strengthen academic language through the use of World-Class Instructional Design (WIDA) standards and assessments in listening, reading, speaking and writing. English learners are placed in ELE classes aligned with their English proficiency levels\* and advance through the program courses until they meet exit criteria with ACCESS 2.0 test scores and specific school-based assessments.

\*English learners' proficiency levels are determined by the WIDA Screener or ACCESS 2.0 scores in listening, reading, speaking, and writing.

This course offers rigorous academic English language arts instruction for multilingual learners at the entering and emerging English language proficiency levels. Students build foundational and text comprehension skills for reading and analyzing literature and informational text. Learning activities are aligned with cross-curricular academic standards and are structured to facilitate the rapid acquisition of vocabulary, literacy skills, and syntax in English. Students practice and acquire age-appropriate pragmatics and presentation skills with the use of technology tools and various forms of media and print.

## Additional Courses Renamed

- English Language I
- English Language II
- English Language III
- English Writing Seminar

# FA020 Songwriting .5 Credit

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Songwriting will develop student skills in mastering melody, harmony, arrangement, lyrics, and composition. This product/project-based course will focus on how to help students develop their self-expression with musical competency and lyrical/thematic depth. Students will achieve their goals as composers by developing their ability to master the basics of music composition, including hearing and notating pitches, intervals, scales and keys, chords, meter, and rhythm. These concepts will be addressed through listening to and composing a wide variety of music based on student interest and genre study, including the music of non-Western culture tonality. The course focuses on modern writing practices, including collaboration and production, as well as performance. The ability to read and write musical notation is fundamental to this course. It is strongly recommended that the student has acquired at least an essential performance skill set in voice or an instrument. (*formerly Music Theory*)

# FA500 Philharmonia Orchestra .5 Credit

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Philharmonia Orchestra is a musical ensemble consisting of string, wind, brass, and percussion instruments. Once auditions are held in mid-October, students enrolled in the Andover Philharmonia Orchestra will rehearse weekly from mid-November to May. This ensemble focuses on producing high-level performances that are musically expressive and technically polished. This ensemble is open by audition to string, wind, brass, and percussion students who are currently enrolled in orchestra, band, or percussion ensemble. Students will perform five to six times per year both in school concerts and throughout the Andover community. Students are expected to practice individually on a regular basis, lead sectionals and rehearsals, and mentor younger players. Attendance at all performances is required. Students should not request this course on their Course Selection Sheet; they will be assigned after auditions. Any student who wishes to participate in Philharmonia Orchestra is required to enroll in at least one semester of Orchestra, Band, or Percussion. This course meets after school.

In AP Art and Design, students create a portfolio of work to demonstrate inquiry through art and design and develop materials, processes, and ideas over a year focusing on drawing, two-dimensional work, or 3D works. Portfolios include finished works, process documentation, and written information about the work presented. Students submit portfolios for evaluation based on specific criteria, which include skillful synthesis of materials, processes, and ideas and sustained investigation through practice, experimentation, and revision, guided by questions. Students will need to work independently to create original work of interest or explore a theme/big idea. The AP<sup>®</sup> Art and Design framework supports student preparation for the AP Portfolio Exam. All AP students must prepare a portfolio to meet the expectations for the College Board's AP Studio Art Portfolio Exam in one of the three areas: Drawing, 2D Design, or 3D Design. (Formerly Portfolio II) Prerequisites: 1.5 credits in Fine Arts Courses and Portfolio I.

This course is an introduction to computer science and the art of programming. Students will learn how computers process and communicate information, in regards to hardware and software. Students will utilize algorithmic thinking to solve problems. Data types, variables, math operations, decision-making, loops, lists, and files will be utilized. Text based languages such as Karel and Python will be introduced. A foundation in computational thinking and in the principles of computer programming will be developed with an emphasis on the common principles of high level computer programming languages. No previous programming experience is required. *Students should sign up for the same level that they are taking for math.* Prerequisites: Minimum grade of B in previous math class. *(formerly Intro to Programming)*



# WL181/WL182 Latin American Cinema 1 Credit pg. 88

In this 5th year elective course, participants are encouraged and expected to integrate all aspects of the Spanish language and to speak Spanish at all times. Students will be able to practice and develop their language skills and study Spanish culture and language through films. Emphasis will be on improving conversational and writing skills, comprehension, film appreciation, as well as discussions on cultural events of the films' contexts. The projected outcome of this course is to provide students with the knowledge, understanding, and skills needed to enable them to have more engaging discussions using Latin American Cinema to improve their communication and cultural proficiency. Through film, students will have the opportunity to improve their fluency in the language and reflect on the language system. Students will also be able to observe and discuss everyday culture as well as gain an understanding of historical events and perspectives. They will see how Hispanic people eat, cook, show affection, travel, play, get married, raise their children, and interact with each other. Students will acquire not only language skills but cultural proficiency as well. The proficiency target at the end of this course is Intermediate-High or emerging Advanced-Low.