

# **Dracut High School**

## **Program of Studies 2024-2025**

### **Superintendent of Schools**

*Mr. Steven Stone*

### **Dracut School Committee**

*Ms. Allison Volpe, Chairperson  
Dr. Linda Trouville, Second Vice Chairperson  
Ms. Renee Young, Board Member  
Dr. Rebecca Duda, Board Member  
Mr. Robert Sheppard, Board Member*

### **Principal**

*Mr. Richard J. Manley*

### **Vice Principals**

*Dr. Mary Carney  
Ms. Maria Lysen*

### **Guidance Counselors**

*Ms. Danielle D'Amato (Freshman Academy)  
Ms. Cynthia Canfield (A – I) Gr. 10-12  
Ms. Jennifer Bullard (J – Mb, ELL) Gr. 10-12  
Mr. Geoffrey Kromer (Mc – Z) Gr. 10-12*

***Guidance Department: 978-957-1500, Extension # 1***

**[www.dracutps.org](http://www.dracutps.org)**

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## **Core Values and Beliefs**

The Dracut High School community is committed to challenging all students with a rigorous curriculum within a safe, healthy, and positive environment. Our primary goal is for students to become lifelong learners in a changing world. We believe in promoting personal responsibility, self-respect, tolerance, and integrity while preparing all students for 21<sup>st</sup> century success. We embrace and value diversity. We advocate environmental and global awareness. We offer various opportunities for all students to thrive and succeed, in and beyond the classroom, so that they may become informed, productive citizens. We encourage our students to take pride in their identity and the Dracut community as they strive toward maximum personal growth.

## **21<sup>st</sup> Century Learning Expectations**

The Dracut High School students will be able to perform the following skills:

*Speak effectively*

*Write effectively*

*Read, view, and interpret a variety of media effectively*

*Demonstrate financial/business literacy*

*Utilize an array of methods to research, analyze, and problem solve*

*Use technology effectively and responsibly*

*Demonstrate cultural literacy*

*Practice personal wellness and social responsibility*

*Promote civic responsibility regarding issues facing our community and the world today*

The Dracut High School graduate will have a working plan for post-high school life.



# Dracut High School

## *Vision of the Graduate*

### **Critical Thinker:**

- Applies logic and reasoning to draw inferences
- Engages in self-reflection
- Evaluates information for validity and bias
- Analyzes using acquired skills and knowledge

### **Collaborator:**

- Works to achieve a common goal
- Listens and responds to feedback
- Includes the contributions of others
- Considers diverse perspectives

### **Communicator:**

- Listens actively
- Demonstrates appropriate use of media
- Expresses thoughts and ideas for multiple audiences
- Develops persuasive arguments

### **Creator:**

- Imagines possibilities
- Innovates solutions to solve problems
- Persists and learns by experience
- Applies technology and new approaches

### **Citizen:**

- Participates in community activities
- Engages in civic responsibilities
- Demonstrates awareness of global issues

## **Accreditation ~ Membership ~ Affiliations**

Dracut High School is an accredited secondary high school that fulfills the criteria for membership in the New England Association of Schools & Colleges. In addition, Dracut High School is an institutional member of the National and Massachusetts Association of Secondary Schools and Principals. All interscholastic sports are governed by local policy, Merrimack Valley League rules, and the guidelines and rules of the Massachusetts Interscholastic Athletic Association.

## **Compliance with Federal and State Regulations**

All rules and regulations are published annually in a Student Handbook that is approved by the Dracut School Council and Dracut School Committee, issued to students, and on file at the State Department of Education. The student handbook spells out the legalities of the policies, but some highlighted points include:

- Dracut High School and property is a Drug-Alcohol-Tobacco Free Zone.
- All questions, decisions, rules, and regulations may be appealed to the Principal, Review Boards, or Superintendent of Schools.
- Student parking on school grounds is a privilege, not a right. Eligible students must purchase a parking pass, register their vehicle with the main office, park in the space assigned, and have their parking pass clearly displayed in their vehicle at all times while parked on school grounds. Vehicles parked on school property are subject to search.
- Students may be excluded from school if charged with a felony, arrested for the sale or possession of illegal drugs, weapons violations, or assaults (including verbal threats) on school personnel.
- All state and federal laws such as those outlawing hazing and harassment will be enforced.

## **Transcript and Temporary Student Records**

All rules and regulations regarding student records are in accordance with the regulations written by Massachusetts Department of Education and outlined in publication #8194. Those items dealing with appeals, amending, notification, severance, destruction and not specifically noted in the Dracut High School policy, will be observed in accordance with state policy. A copy of state and local regulations may be obtained from the high school administration or guidance offices.

## **Non-Discrimination**

In compliance with state law, Chapter 622 of the General Law, Acts of 1971 and federal law, Title IX of the Education Amendments of 1972, the Dracut Public Schools informs students and parents that all courses of study and extracurricular activities are open and available to members of all sexes and minority groups. Full definition of the laws, local policies, and answers to questions may be obtained from the Principal and/or the Superintendent.

## **Graduation Requirements**

*Students must earn 22 credits in order to graduate. The breakdown is as follows:*

English	4.5 credits	Social Studies	4 credits
Math	3 credits	Science	3 credits
World Language	1 credit	Wellness	1 credit
Unified Arts	1 credit*		

*\*Unified Arts is satisfied by any course in Business, Technology, Visual Arts or Performing Arts*

## **Graduation Requirements (Cont'd):**

*Students must pass all MCAS Graduation / Competency Determination requirements for the student's specific graduation year in order to receive a high school diploma*

## **Physical Education**

In accordance with M.G.L. c. 71 § 3, all Dracut High School students must enroll in physical education in each of their four years of high school. Enrollment in interscholastic sports, Marching Band, or Show Choir satisfies this requirement.

## **Grade Promotion Requirements**

In order to attain the necessary credits to progress towards graduation, students must earn a minimum number of credits by the end of each academic year:

- At the completion of 9<sup>th</sup> grade and to be considered a sophomore: *5 credits*
- At the completion of 10<sup>th</sup> grade and to be considered a junior: *10 credits*
- At the completion of 11<sup>th</sup> grade and to be considered a senior: *15 credits*
- At the completion of 12<sup>th</sup> grade and to be considered a graduate of DHS: *22 credits*

**When selecting a program of study a student should be mindful of the following guidelines:**

- ❖ A student must pass all required subjects and successfully pass 5 credits each year in order to graduate from Dracut High School. A total of 22 credits must be passed, and students must pass the Massachusetts Comprehensive Assessment System (MCAS) in order to be awarded a diploma.
- ❖ Credit is awarded to students who receive a passing grade and have been in attendance (or completed makeup work) 180 school days per year. Students absent more than 4 days per quarter of class time will not be awarded academic credit. An Attendance Review Board is established to review just causes that involve absences over the allowable limit from school and/or class. The Board has the right to grant waivers for just cause.
- ❖ A student must pass 5 credits, including English, each year in order to be promoted toward graduation. A student must be fully enrolled in 7 classes or courses, unless assigned for specialized instruction, enrolled in a career internship, enrolled in a course at a local college, or enrolled in a school-based community service project.

## **Summer School Requirements**

Students who fail a course and wish to attend summer school must have prior approval from the principal. Approval will be granted to students provided the following criteria have been met: (a) Course/program is given at an approved institution and (b) Student has shown some success by passing at least two quarters in that subject. A student who has not met the criteria yet and wishes to attend summer school may appeal his/her situation to the principal for special consideration. Within an academic discipline, a student may not earn more than two credits from successive summer school programs. (No more than 2 credits of English may be earned in summer school.)

## **Parent Communication & Academic Assistance**

Working with parents and students, the professional staff at DHS is dedicated to having students succeed in school. Parents are regularly informed of their child's progress in school. Parents are urged to monitor their student's academic progress using the parent portal and to communicate with their child's teachers and guidance counselor. Every teacher is available during and after school to assist students who are experiencing difficulty.

## **Tutoring Policy**

Tutoring is available for students who are absent for prolonged periods, usually longer than two weeks. These students would be unable to attend school because of illness, injury, or handicap. Parents should phone the guidance office at 978-957-1500 Ext. 1 whenever a health problem is the cause of a student's extended absence. The student's guidance counselor acts as a liaison between the home and the school.

## **Special Needs Services**

The Special Education Department provides individual and group specialized instruction for all students identified as eligible for special education services under the guidelines of 64CMR28/IDEA. Special Education students receive services in and out of the general curriculum as outlined in each student's Individualized Educational Program (IEP). In addition to the direct services provided by DHS Special Education teachers, the following related services are available as outlined in students' IEPs: speech/language therapy, audiology, occupational therapy, physical therapy, orientation and mobility, vision, psychological services for clinical testing, BCBA consultation, and school adjustment counseling.

## **Guidance Department Services**

The guidance staff at Dracut High School is committed to the intellectual, emotional, and social growth of all students. By guiding each student through their educational program, counselors seek to foster and facilitate the development of each student's potential. Our goal is to encourage participation in educational, community, and social programs that match each student's characteristics in order to gain competencies needed to plan for post-high school decisions.

Students should make an appointment to meet with their guidance counselor throughout the school day; emergency situations or urgent concerns will receive immediate attention. Students are encouraged to seek assistance when needed. Parents are encouraged to attend the breakfast with guidance seminars to

support their child's educational and social growth. Counselors provide grade level group information sessions throughout the year for all students as well as individual meetings.

The guidance department uses Naviance, a web-based resource that supports college and career post-secondary planning. Naviance has grade level specific functions that are introduced each year by the guidance counselors in group meetings.

*Students and families are encouraged to check the guidance webpage for upcoming events, forms, and important grade level information.*

## Student Scheduling Process

During the second semester, students and parents will be able to refer to the Program of Studies online booklet available on the DHS webpage ([www.dracutps.org](http://www.dracutps.org)). Teachers, counselors, and administration will be available for consultation. The faculty make specific recommendations about student placement in required and sequential courses. In scheduling a student's program, the school will attempt to meet the immediate and future objectives of each student. The following factors are used to determine individual achievement levels: an evaluation of previous academic performance and the recommendation of teachers.

### **Course Selection:**

Students are required to enroll in seven courses per academic year in grades 9-12. During the course selection process, teachers will submit course recommendations for their current students. Teacher recommendations will be based on current grade averages, departmental criteria, and individual conferences with students. Guidance counselors will review recommended core courses and assist students with choosing elective courses.

### **Course Level Appeal:**

Students must obtain the approval of the academic department chair for course level appeals if the student does not meet the prerequisites of the class or if the student requests to take a course(s) not recommended by their current teacher(s).

### **Procedures for Changing and/or Withdrawing from a Course:**

Course schedules and individual classes are subject to change. Students requesting class changes must fill out the schedule change request form available in guidance during the announced add/drop period. During the school year, the following grade policy will apply:

- Withdrawing prior to October 1 → Course deleted, no record
- Withdrawing after October 1 → W (withdrawn) will be entered
- Moving up/down an academic level: Grades earned in a course will be transferred to the new course which will affect the weight of grades towards GPA. (ex. If a student moves from an honors course to a CP level course, the grades earned in Honors course will transfer to the CP course and the weight of the grade will be CP level for the purposes of calculating the student's GPA).



## Honors & Advanced Placement Courses

Students enrolled in an Advanced Placement course must register and pay for the examination **BEFORE** a transcript will be sent to a college indicating they are enrolled in an Advanced Placement course. Advanced Placement opportunities such as college credit may result from success in this program. It is recommended that **a student enroll in no more than 3 Advanced Placement courses**, with exceptions authorized by the principal.

These courses are designed for students who are highly motivated to complete challenging academic work. Each discipline also has its recommendations and requirements for entering and remaining in honors courses. Coursework will be taught at an accelerated rate and will require critical and analytical thinking skills. A comprehensive understanding of the subject is the major goal. Independent study and individual responsibility are also required.

Students enrolling in an honors course must adhere to the following qualifications and responsibilities:

1. They **must be recommended** by members of the professional staff, based on students' past performance and departmental criteria.
2. There **must be written evidence** of commitment and cooperation by students and parents to adhere to policies regarding attendance, homework, and independent study.
3. They **must be recommended** by the teacher and the department head in order to remain in honors courses.

## College Preparatory I (CPI)

Courses at this level are designed for students who enter a four-year university or college upon graduation. Outside reading and research are required, and students will work well beyond mere memorization. Emphasis in these courses is on the ability to think logically and to write and communicate effectively.

## College Preparatory II (CPII)

These courses are designed for students who plan to continue their education at a two-year technical school, community college, or a business/skill learning site after graduation. While the focus of these courses is on developing abilities and skills, emphasis is also placed upon learning to think, communicate, and solve problems.

## Student Transcript Guide

Letter grades are used to report student progress. The plus and minus signs are utilized to indicate degrees of performance within that alpha grade.

### ALPHA GRADING CHART

A+	97-100	C+	77-79
A	93-96	C	73-76
A-	90-92	C-	70-72
B+	87-89	D+	67-69
B	83-86	D	63-66
B-	80-82	D-	60-62
		F	00-59

### CODE

### MEANING

I	Incomplete (No grade or credit)
M	Medically Excused
P	Pass
W	Withdrawn
F	Fail
NC	No Credit

**CREDIT:** In order to earn credit, a student must pass the academic requirements as indicated in the final grade, and have met the course attendance requirement by having attended at least 91% of scheduled classes for the semester/year. The student receives one credit for a full year course and ½ credit for a semester course. Students are required to take seven credits per year. The Carnegie Unit (credit) is utilized to measure student progress.

## Class Rank

The rank in class is computed on the basis of all courses taken by the student in grade 9 through the end of the first semester of grade 12. The selection of the top 20 senior scholars including the class valedictorian and salutatorian is based upon the class rank calculations at the end of the first semester of the senior year. Classes that are graded Pass/Fail (P/F) will not be part of the computation for rank in class. The following chart delineates the weighting system:

GRADE	ADVANCED PLACEMENT	HONORS	COLLEGE PREPARATORY I
A+	5.3	4.8	4.3
A	5.0	4.5	4.0
A-	4.7	4.2	3.7
B+	4.3	3.8	3.3
B	4.0	3.5	3.0
B-	3.7	3.2	2.7
C+	3.3	2.8	2.3
C	3.0	2.5	2.0
C-	2.7	2.2	1.7
D+	2.3	1.8	1.3
D	2.0	1.5	1.0
D-	1.7	1.2	0.7

## Corrective Feedback and Remediation

Remediation provides students with opportunities to relearn course content, retake summative assessments, or correct major assignments. In consultation with their teachers, students who earn a D or F will have an additional opportunity to demonstrate their learning and improve their grade. Remediation should occur within ten school days of the student receiving the original assessment. Remediation may include test retakes, test corrections, improvements to major assignments, or self-reflections submitted to the teacher. Remediation is not available for cornerstone assessments, midterm examinations, or final examinations. Upon successful remediation students may earn up to ½ of the credit lost on the original assessment.

## Honor Roll

The Honor Roll is developed at the end of each quarter. To achieve Honor Roll status, a student must earn all grades of A for High Honors, and all grades of A or B for Honors.

## National Honor Society

Admission to the National Honor Society is a distinction honoring students who have achieved excellence in Scholarship, Character, Leadership and Service. Candidates eligible for election to this chapter must be of the junior or senior class. Candidates eligible for election to the chapter shall have a minimum cumulative grade point average of 3.5 at the end of the first semester of their junior year. Upon meeting the grade level and GPA standard requirements, candidates shall then be considered based on their service, leadership, and character. A cumulative GPA of 3.75 will be required for students beginning with the class of 2026.

The National Honor Faculty Committee reviews the applications and recommends the students **who are the most outstanding** in these areas to the principal. The criteria are listed below with examples of the criteria that are examined:

1. Scholarship (GPA)
2. Character (attendance, tardies, behavior)
3. Leadership (activities including sports, clubs, leadership positions, dance lessons, private music lessons, school musicals, Jazz band, scouts, etc.)
4. Service (community, religious institutions, school)

The final selection is based upon the student's transcript GPA and documented information provided by the student. All applicants must submit detailed Community Service and Leadership Logs.

Students must continue to demonstrate academic success, exemplary character, active service, and sound leadership throughout their senior year.

There is additional opportunity at the end of the first marking period for senior students to ***reapply if they qualified for Scholarship but lacked sufficient Character, Leadership and/or Service points.*** This invitation is extended to those students who had applied during their junior year.

## COMMUNITY SERVICE LOG (Sample)

Service Activity	Date	# of Hours	Verifying Signature	Telephone #

### **Foreign Language Honor Society**

During senior year, all students actively engaged in the fourth year of the study of Spanish, who meet the general and scholastic (“A” average) eligibility requirements, are eligible for nomination to membership in the National Foreign Language Honor Societies. Candidates are selected and inducted in their senior year.

### **Seal of Biliteracy**

The State Seal of Biliteracy is an award that recognizes high school graduates who attain high functional and academic levels of proficiency in both English and a world language. Eligible students must demonstrate proficiency in English by achieving the minimum score “Meets Expectations” on the MCAS English Language Arts assessment, as well as attain a minimum score of Intermediate-High on an approved world language assessment in each of the four domains of communication: reading, writing, listening, and speaking. Students identified as English Language Learners may demonstrate proficiency in English through an alternate, state-approved, assessment.

### **National Business Honor Society**


Admittance into the National Business Honor Society is a distinction honoring students who have achieved excellence in their business classes through Involvement, Leadership and Achievement. In the third marking period of junior year, students who have achieved a cumulative GPA of 3.00, are invited to submit an application for nomination into the Dracut High School Chapter of the National Business Honor Society. Students will record the number of Business Courses completed, and those in progress, on the application. The final selection is based upon the student completing at least two (2) business courses and enrolled in a third by the end of their junior year while achieving a business course GPA of 3.5. This is verified through student transcripts.

Beginning with the Class of 2026 the following requirements must be met: After five consecutive semesters, students who have achieved a cumulative GPA of 3.5, will be invited to submit an application for nomination into the Dracut High School Chapter of the National Business Honor Society. Students will record the number of Business Courses completed and in progress on the application. The final selection is based upon the student completing at least two (2) business courses and enrolled in a third by the end of their junior year while achieving a business course GPA of 3.75. This is verified through student transcripts.

## NCAA Eligibility Requirements

The core course requirements for Division I and Division II athletics are:

- 4 years of English
- 3 years of Mathematics (Algebra I or higher)
- 2 years of Natural/Physical Science (1 year of Lab if offered)
- 1 year of additional English, Mathematics or Natural/Physical Science
- 2 years of Social Science
- 4 years of additional courses (any area above, Foreign Language or comparative Religion/Philosophy)

Dracut High School courses that meet these requirements are indicated by the NCAA symbol. 

Students must also earn the ACT/SAT score matching their core-course GPA on the sliding scale.

Please reference the NCAA website for more information at [www.eligibilitycenter.org](http://www.eligibilitycenter.org).

## Eligibility to Participate in Co-Curricular Activities

Dracut High School's policy states that students who wish to participate in any co-curricular or interscholastic sports must secure, during the last marking period preceding the contest, a passing grade and full credit, in the equivalent of four year-long major subject courses. Eligibility for those seniors and special education students, whose schedules may not include four year-long courses, will be guided by MIAA rules and DHS administrators. This academic requirement applies to all Dracut High School co-curricular activities. Students who do not meet this eligibility may not:

1. Participate in a fund-raising activity
2. Drive/park on school property during school hours
3. Practice or participate in interscholastic sports
4. Participate in public performance or services

**In addition to academic eligibility, students must be present in school on days they participate in a co-curricular activity. Students absent from school cannot participate in a co-curricular activity on that date (nor on the weekend, if absent on a Friday).**

**The MIAA chemical health rule also applies to all co-curricular activities. Students in possession of, or present with, drugs and/or alcohol will be suspended from participation in an activity for two weeks or from two activities, whichever is longer.**

## College Application Process

College entrance requirements vary greatly and students should carefully review individual college/university requirements. In order to best prepare for the highly competitive college admission process, students are strongly encouraged to take as demanding a schedule as individually possible during their four years at Dracut High School.

### **College Admissions Offices will review the following criteria:**

- Grades in all college preparatory, honors, AP courses
- Rigor of course selection
- Overall Grade Point Average (GPA)
- Letters of Recommendation (teacher/guidance counselor)
- Standardized Test Scores (SAT/ACT)
- Application Essay
- Quality commitment to school and community

### **Suggested High School Course of Study for College Admission:**

- English 4 years
- History 4 years
- Math 4 years
- Science 4 years
- Foreign Language 2-4 years
- Electives-depends on personal interests and educational goals

### **Minimum Admission Requirements: *Massachusetts State University System and UMass***

- English - 4 courses
- Math - 4 courses (Algebra I & II and Geometry or Trigonometry, or comparable coursework) including mathematics during the final year of high school)
- Science - 3 courses (Natural Science and/or Physical Science and/or Technology/ Engineering), including 3 courses with laboratory work
- Social Sciences - 2 courses (including 1 course in U.S. History)
- Foreign Languages - 2 courses (in a single language)
- Electives - 2 courses (from the above subjects or from the Arts & Humanities or Computer Sciences)

# ENGLISH LANGUAGE ARTS

## MISSION STATEMENT

The Dracut High School English Language Arts Department provides a learning environment that incorporates the Massachusetts Curriculum Framework for English Language Arts and Literacy in the areas of reading, writing, speaking, listening and language. Teachers provide experiences and activities that enable students to develop proficiency and versatility in the use of the English language. The development of strong analytical and critical thinking skills is encouraged and sequential. All courses are designed to prepare students to be career and college ready in the 21<sup>st</sup> century and promote students to become lifelong learners.

## 21<sup>st</sup> CENTURY LEARNING EXPECTATIONS

The Dracut High School Student will practice the following skills in core English classes and English electives:

- Listen actively and critically
- Write effectively
- Speak effectively
- Read actively and critically
- Read, view, and interpret a variety of media effectively
- Utilize an array of methods to research, analyze, and problem solve
- Use technology effectively and responsibly
- Demonstrate cultural literacy
- Promote civic responsibility regarding issues facing our community and the world
- Practice personal wellness and social responsibility

**Note:** All students are required to earn 4.5 credits in English. Students are placed in Advanced Placement, Honors, or College Preparation based on past academic performance, teacher recommendation and test scores.

## FRESHMAN ENGLISH

### 011 ENGLISH 9 HONORS



1 credit

This course challenges students to analyze elements of literature and the major literary genres: epic and lyric poetry, the short story, the novel, and Shakespearean drama. Students are expected to meet the increased academic demands of this writing-intensive course. Compositions will focus on developing a topic, establishing a purpose, and determining an audience. Analytical and expository writing skills will be emphasized. *21<sup>st</sup> century learner expectations: speak effectively; write effectively.*

### 013 ENGLISH 9 COLLEGE PREPARATORY



1 credit

This course introduces students to elements of literature and the major literary genres: epic and lyric poetry, the short story, the novel, and Shakespearean drama. Frequent composition assignments require students to write critically about what they read. Considerable emphasis will also be placed on study skills, learning to organize effectively, and vocabulary development. *21<sup>st</sup> century learner expectations: speak effectively; write effectively.*

## SOPHOMORE ENGLISH

### **021 ENGLISH 10 HONORS**



**1 credit**

This course is an intensive study of literature from a critical point of view, introducing the student to the different forms and elements of the works studied as well as the relationships established among these elements. Content includes a survey of the short story, classic and modern novels, and Shakespearean drama. Frequent writing assignments focus on structure, the development of ideas through evidence, and persuasion techniques. Focus is placed on the application of literary terms and rhetorical devices. Annotation and note-taking skills will be emphasized. Students participate in an intensive MCAS preparation program. *21<sup>st</sup> century learner expectations: speak effectively; write effectively.*

### **023 ENGLISH 10 COLLEGE PREPARATORY**



**1 credit**

This course encourages students to read literature from a critical point of view. Content includes a survey of the short story, several modern and classic novels, and Shakespearean drama. Frequent writing assignments will focus on logical organization, the development of ideas, and persuasion. Students participate in an intensive MCAS preparation program. *21<sup>st</sup> learner expectations: speak effectively; write effectively.*

## JUNIOR ENGLISH

### **030 ADVANCED PLACEMENT/DUAL ENROLLMENT ENGLISH LANGUAGE COMPOSITION**



**1 credit**

The AP course in English Language and Composition engages students in becoming skilled readers of prose written in a variety of rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. Both their writing and their reading should make students aware of the interactions among a writer's purposes, audience expectations, and subjects, as well as the way genre conventions and the resources of language contribute to effectiveness in writing. This course is designed as an introductory college level course and will prepare students for the Advanced Placement examination in Language and Composition. A qualifying score on the required national Advanced Placement exam will earn college credit. *21<sup>st</sup> century learner expectations: speak effectively; write effectively.*

*\*Prerequisite: Summer work is required*

### **031 ENGLISH 11 HONORS**



**1 credit**

This is an accelerated course in the origins and development of American literature and includes the study of a wide range of literary types, from poetry and essays to novels and plays. Emphasis will be placed on critical and analytical writing skills through composition writing and revision. Students will participate in a variety of writing tasks and projects to improve their skills and sharpen their understanding of the American experience. There is intensive preparation for the PSAT and SAT examinations. *21<sup>st</sup> learner expectations: speak effectively; write effectively.*

### **033 ENGLISH 11 COLLEGE PREPARATORY**



**1 credit**

Students will study the origins and development of American literature from the Colonial period to the present. A wide variety of literary forms are read, including the novel, short story, and drama. The expository writing aspects of the program emphasize interpretation and evaluation of how the literature is written. There is preparation for the PSAT and SAT examinations. *21<sup>st</sup> century learner expectations: speak effectively; write effectively.*



## SENIOR ENGLISH

### **040 ADVANCED PLACEMENT ENGLISH LITERATURE & COMP**



**1 credit**

The AP course in English Literature and Composition provides a critical study of literature, as well as analytical writing about literature. The course will be conducted as a seminar, requiring thoughtful discussion and journaling, well-organized by both genre and time period. Novels, short stories, plays, poems, and essays will be read throughout the year, either in class as a group or at home individually. Types of writing will vary from informal journal entries to polished compositions and research papers. Peer editing and review are necessary functions of the writing process and will be required. This course is designed as an introductory college level course and will prepare students for the Advanced Placement examination in Language and Composition. A qualifying score on the required national Advanced Placement exam will earn college credit. *21<sup>st</sup> century learner expectations: speak effectively; write effectively.* \*Prerequisite: Summer work is required

### **041 ENGLISH 12 HONORS**



**1 credit**

Honors English 12 consists of a chronological survey of British and World Literature from the Anglo-Saxon Age through the Modern Age. Students will focus on timeless themes arranged historically and thematically. Focus will include a variety of literary selections as students critically answer, discuss and write about questions which radiate from the works and offer sharp insights into human behavior, motivation, and character. Key strategies and skills for SAT success will also be reviewed and practiced. *21<sup>st</sup> century learner expectations: speak effectively; write effectively.*

### **043 ENGLISH 12 COLLEGE PREPARATORY**



**1 credit**

Students will study a chronological survey of major British and World Literature. Stress will be placed on college preparatory critical writing and reading. Students will be expected to make independent, interpretive judgments about their reading and to write critical essays. In addition, students will review and practice key strategies and skills for SAT success and will complete a college entrance essay. *21<sup>st</sup> century learner expectations: speak effectively; write effectively.*

## ENGLISH ELECTIVES

### **080 CREATIVE ESSAY WRITING**



**½ credit**

This course will allow students to express themselves creatively through writing. Contrary to the title, the course is not solely about essays. The class will address the personal narrative, fictional and nonfictional short stories, poetry, and other forms of writing as art forms. On occasion, the class will read and discuss essays, short stories and poems from great writers both past and present. Students will be asked to write a number of writing pieces in which they creatively explore their own ideas, interests, values and emotions. Students are offered the opportunity to work collaboratively with others in the class. A student should exit this course feeling confident as a writer while simultaneously gaining a better understanding of his or her life and the diverse lives of their classmates. Most importantly, this class is designed as a creative and artistic journey of self-discovery, both as a young adult and as a writer. *This course is open to all students. 21<sup>st</sup> century learner expectations: speak effectively; write effectively.*

**090 FILM AS LITERATURE****½ credit**

This course is for students who love and appreciate film. Throughout the semester students will examine a variety of films from different genres and time periods. They will identify various aspects of filmmaking such as lighting, camera angles, narration, themes, and symbols and how a film communicates vital visual and auditory information to the viewer. Students will be assessed on their ability to actively watch films while note taking as well as completing creative projects, quizzes and tests. In addition, students will be asked to select a film of their choice to analyze using the concepts learned throughout the semester and present for a final project. *This course is open to all students. 21<sup>st</sup> century learner expectations: speak effectively; write effectively.*

**092 MASS COMMUNICATION: THE MEDIA IN YOUR LIFE****½ credit**

This course is for students who want to better understand the ways in which all of our lives are affected by media - as individuals and as a society. Each week, students will trace the role and evolution of various forms of mass media (movies, television, music, advertising, newspapers, etc.), as well as their possible effects and responsibilities. Various movies and television programs will be incorporated to examine their use of media and role in popular culture. At the end of each quarter, students will develop and justify an authentic piece of media (a podcast, a movie review, a magazine spread, an advertising campaign, etc.). *This course is open to all students. 21<sup>st</sup> century learner expectations: speak effectively; write effectively.*

**095 HORROR AND THE SUPERNATURAL****½ credit**

“The oldest and strongest emotion of mankind is fear, and the oldest and strongest kind of fear is fear of the unknown.” –H.P. Lovecraft. This semester-long course examines the genre of horror, including its links to the supernatural. Why are we drawn to that which frightens and mystifies us? Students will study classic works by Edgar Allan Poe, Mary Shelly, H.P. Lovecraft, and Charles Dickens as well as modern day masters of the genre from the Americas and the world. Students will study relevant non-fiction material, and they will also examine the literary elements of horror in film and the use of music in media to create mood. *This course is open to all students. 21<sup>st</sup> century learner expectations: speak effectively; write effectively.*

**097 PHOTOJOURNALISM****½ credit**

Photojournalism combines pictures and words to present a compelling and engaging message to the audience. Using words and pictures found in everyday life, students learn to convey ideas, thoughts, and perspectives using images and prose. Students develop and edit photographs and combine these photographs with compelling prose to bring pictures to life and life to words. *This course is open to all students. 21<sup>st</sup> century learner expectations: speak effectively; write effectively.*

# HISTORY AND SOCIAL SCIENCE

## MISSION STATEMENT

The History and Social Sciences Department accepts unequivocally its mission as expressed in the Core Concept of the Massachusetts History and Social Science Framework. Teachers are committed to preparing students to think critically, to appreciate the unique contributions of diverse peoples to American and world civilization, to understand the democratic and cultural heritage of the American people, and to view knowledge holistically from a multi-cultural perspective.

## 21<sup>st</sup> CENTURY LEARNING EXPECTATIONS

The Dracut High School Student will practice the following skills in core History classes and History electives:

- Listen actively and critically
- Write effectively
- Speak effectively
- Read actively and critically
- Read, view, and interpret a variety of media effectively
- Utilize an array of methods to research, analyze, and problem solve
- Use technology effectively and responsibly
- Demonstrate cultural literacy
- Promote civic responsibility regarding issues facing our community and the world
- Practice personal wellness and social responsibility

## NOTES TO ASSIST IN SELECTING COURSES

- Honors & AP courses afford an opportunity for in-depth study in history
- Freshmen are required to pass *World History*.
- Sophomores are required to pass *United States History I*.
- Juniors are required to pass *United States History II*.
- Seniors are required to pass *AP European History* or *AP/Dual Enrollment U.S. Government & Politics* or *American Government*.

## FRESHMAN HISTORY AND SOCIAL SCIENCE

### 111-113 WORLD HISTORY



**1 credit**

This survey course examines World History from the 1500's through 21st Century Globalization. The course traces major world political, social, geographic, cultural, and economic developments and concludes with the effects such developments have had upon the modern world. Asian, African, and Latin American history themes are woven into the course presentation. Emphasis is placed upon political, social, industrial, and scientific revolutions as well as industrialism, imperialism, and nationalism. ***21<sup>st</sup> century learner expectations: read, view, and interpret a variety of media effectively; promote civic responsibility regarding issues facing our community and the world.***

*Prerequisite for 111: An "A" final average in Grade 8 or a strong teacher recommendation AND departmental approval.* 111 - Honors World History / 113 - World History - College Preparatory.

## SOPHOMORE HISTORY AND SOCIAL SCIENCE

### **121-123 UNITED STATES HISTORY I**



**1 credit**

United States History I is a survey course covering the origins of the Revolution and Constitution through Industrialization. Major attention is given to the Revolutionary era, the development of America's constitutional government, territorial expansion of the United States, the Civil War, Reconstruction, and Industrial America. Throughout the course, emphasis will be placed on interpreting significant developments of the American past as they have shaped and influenced current American attitudes and events. ***21<sup>st</sup> century learner expectations: read, view, and interpret a variety of media effectively; promote civic responsibility regarding issues facing our community and the world.***

*Prerequisite for 121: An "A" final average in Grade 9 or a strong teacher recommendation AND departmental approval.* 121 - Honors United States History I / 123 – United States History I - College Preparatory.

## JUNIOR HISTORY AND SOCIAL SCIENCE

### **130 ADVANCED PLACEMENT U. S. HISTORY II**



**1 credit**

This survey course stresses both acquisition of factual knowledge and analytical skills in the study of our nation's history from the 2<sup>nd</sup> Industrial Revolution to the contemporary era. Extensive document analysis, outside readings in primary and secondary sources, and the writing of document-based essays are required of AP students. In addition, students are required to take the Advanced Placement United States History exam. ***21<sup>st</sup> century learner expectations: read, view, and interpret a variety of media effectively; promote civic responsibility regarding issues facing our community and the world.***

*Prerequisite: An "A" final grade average in Honors United States History I AND departmental approval and summer work is required*

### **131-133 UNITED STATES HISTORY II**



**1 credit**

United States History II is a survey course covering life at the turn of the 20<sup>th</sup> century to the present day. Major attention is given to the growth of American industries and cities, social and cultural developments, the two World Wars, the Roaring 20's and the Great Depression, the Cold War, and the emergence of the United States as a world power. Throughout the course, emphasis will be placed on interpreting significant developments of the American past as they shaped and influenced current American attitudes and events. ***21<sup>st</sup> century learner expectations: read, view, and interpret a variety of media effectively; promote civic responsibility regarding issues facing our community and the world.***

*Prerequisite for 131: An "A" final average in Grade 10 or a strong teacher recommendation AND departmental approval.* 131 - Honors United States History II / 133 – United States History II – College Preparatory

## REQUIRED SENIOR HISTORY AND SOCIAL SCIENCE

### **141-143 AMERICAN GOVERNMENT DUAL ENROLLMENT (141 Only)**



**1 credit**

This course enables students to understand the fundamental theory and structure of our democratic system of government. Students will explore the foundations of our political system, its three branches, and federal, state, and local government. Particular emphasis will be placed upon the Declaration of Independence, the United States Constitution, the Bill of Rights, and other important documents.

Students will also study individual rights and responsibilities, our economic system as well as the relationship of the United States to the rest of the world, and current issues affecting their lives. All are encouraged to participate actively in the democratic process within the school and community through their interaction with local and state governmental bodies and officials as they hear guest speakers and attend board meetings. ***21<sup>st</sup> century learner expectations: read, view, and interpret a variety of media effectively; promote civic responsibility regarding issues facing our community and the world.***

*Prerequisite for 141: An “A” final average in Grade 11 or a strong teacher recommendation AND departmental approval. Seniors enrolled in an Advanced Placement Social Studies course are exempt from the requirement to take this course. 141 – Honors American Government-Dual Enrollment 143 – American Government – College Preparatory*

### **155 ADVANCED PLACEMENT EUROPEAN HISTORY**



**1 credit**

European history features the major themes in European civilization from the mid-15th century through the 20th century. Emphasis is upon the analysis and interpretation of historical evidence as well as upon the significant factual data comprising Europe’s history in the modern era. Extensive outside readings and research papers as well as the taking of the Advanced Placement exam in European history will be required. ***21<sup>st</sup> century learner expectations: read, view, and interpret a variety of media effectively; promote civic responsibility regarding issues facing our community and the world.***

*Prerequisite: A final grade average of “B” or above in a current core History class and departmental approval. Juniors can take it with permission. Summer work is required.*

### **162 ADVANCED PLACEMENT U.S. GOVERNMENT**



**1 credit**

Advanced Placement/Dual Enrollment United States Government and Politics is a college level program that focuses on the process of American constitutional government. Extensive outside readings in foundation documents and sources, analytical research papers, and a keen interest in current issues affecting the American democratic system are essential components of this course. All students are required to take the Advanced Placement exam in U.S Government and Politics. A passing score on the Accuplacer Exam administered by Middlesex Community College (MCC) allows students to register for dual enrollment credit in which they will earn high school and college credit for this course. Students are responsible for the cost associated with the credits earned from MCC. ***21<sup>st</sup> century learner expectations: read, view, and interpret a variety of media effectively; promote civic responsibility regarding issues facing our community and the world.***

*Prerequisite: An “A” final grade average in Honors U.S. History II or an “A” or “B” final grade average in Advanced Placement U.S. History II and departmental approval. Summer work is required.*

## **ELECTIVE SENIOR HISTORY AND SOCIAL SCIENCE**

### **140 ADVANCED PLACEMENT PSYCHOLOGY**



**1 credit**

The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. ***21<sup>st</sup> century learner expectations: read, view, and interpret a variety of media effectively; promote civic responsibility regarding issues facing our community and the world.***

*Prerequisites: All students who are willing to accept the challenge of a rigorous academic curriculum should be considered for admission to this AP Psychology class. Summer work is required.*

## 142 INTRODUCTION TO PSYCHOLOGY



½ credit

Psychology is designed to introduce the student to concepts necessary to understand human behavior. Major topics studied in this course are self-awareness and understanding, personality development, abnormal behavior, learning theory, intelligence, and psychological testing. In addition, the theories of major psychologists such as Freud, Jung, Adler, and Skinner will be presented. *21<sup>st</sup> century learner expectations: read, view, and interpret a variety of media effectively; promote civic responsibility regarding issues facing our community and the world.*

## 145 SOCIOLOGY



½ credit

Sociology is the scientific study of social structure, the patterned interaction of people in social relationships. It examines the human relationships within social societies. Major topics studied in this course are Culture, Socialization, Deviance and Social Control and the Social Stratification of society. Emphasis in this course will be placed upon contemporary American society. *21<sup>st</sup> century learner expectations: read, view, and interpret a variety of media effectively; promote civic responsibility regarding issues facing our community and the world.*

## 146 GLOBAL ISSUES IN THE 21<sup>ST</sup> CENTURY



½ credit

Students will study the complex issues that impact their state, nation, and the world and learn how 21st century media shapes these events. Students will conduct research to understand the historical context of current economic, political, social, and cultural movements and use this knowledge to predict future trends. Students will participate in extensive class debate and discussion. Students will also conduct original research to explore how these global issues impact the local community. *21<sup>st</sup> century learner expectations: Read, view, and interpret a variety of media effectively; Promote civic responsibility regarding issues facing our community and the world*

# WORLD LANGUAGES

## MISSION STATEMENT

The Dracut High School World Languages Department is committed to providing a safe and challenging environment so that Dracut students will be able to acquire the knowledge and skills needed to be culturally and linguistically ready to participate in a global society.

## 21<sup>st</sup> CENTURY LEARNING EXPECTATIONS

The Dracut High School Student will practice the following skills in World Language courses:

- Speak effectively
- Write effectively
- Read, view, and interpret a variety of media effectively
- Demonstrate cultural literacy
- Promote civic responsibility regarding issues facing our community and the world today

**NOTES:** All students must pass one year of a world language, three (3) units are recommended for College Preparatory students.

## COURSE OFFERINGS

### 251 SPANISH I



1 credit

This course is intended for students who have never studied Spanish or who completed an introductory course at the middle school level. Through this course, students are introduced to Spanish language and culture as they learn to manipulate spoken and written Spanish through the use of thematic vocabulary, grammar, and cultural information. *Grade 9 students wishing to enroll at a higher level must schedule a placement exam prior to the start of the school year.* 251– College Preparatory **21<sup>st</sup> Century Learner Expectation: Demonstrate cultural literacy**

### 260 SPANISH II HONORS



1 credit

Students who have demonstrated proficiency and are interested in an accelerated language learning experience may enroll in Spanish II Honors. This fast-paced course continues to delve into the beauty and complexity of the Spanish language and culture as students work to further develop their communicative skills. Reading selections and journal activities relating to thematic units will be used to enhance the core curriculum. There is an emphasis on oral and written use of the language, as students will be expected to speak and write at an appropriate level in the target language. Concurrently, students will continue to explore the similarities and differences between Hispanic and American life. 260 – Spanish II Honors **21<sup>st</sup> Century Learner Expectation: Demonstrate cultural literacy**


### 261 SPANISH II



1 credit


Students who enroll in Spanish II continue to develop their language skills in the four modalities: listening, speaking, reading, and writing. The focus of the course is on the acquisition and use of thematic vocabulary and related grammatical concepts. Students participate in guided and structured exercise, both oral and written, to practice new vocabulary and grammar structures. In addition to language study, students will continue to draw cultural comparisons between the English and Spanish-speaking worlds as they explore Europe, Central and South America, and Spanish-speaking U.S. communities. 261 – College Preparatory **21<sup>st</sup> Century Learner Expectation: Demonstrate cultural literacy**

### 270 SPANISH III HONORS

 1 credit

Spanish III Honors is designed to assist students in taking their language learning to the next level. Students will continue to develop their oral and written communication skills by interacting with advanced grammar and vocabulary concepts. More authentic, creative use of the language will begin to replace structured, guided responses. Short stories, adapted Spanish literature, and Spanish newspaper and magazine articles are incorporated in an effort to expose students to a media-rich language environment. Students learn to communicate and express themselves effectively as they continue to learn about the daily aspects of life in Spain and other areas of the Spanish-speaking world. 270 – Spanish III Honors *21<sup>st</sup> Century Learner Expectation: Demonstrate cultural literacy*

### 271 SPANISH III

 1 credit

Building upon previously acquired skills, students enrolled in Spanish III will continue to develop their oral and written skills at an appropriate level. Students will begin to explore complex grammar structures as well as augment their repertoire of thematic vocabulary. Brief conversations, guided reading and structured writing will be based on daily life activities, current events, and relevant cultural information. The continued emphasis in this course will be vocabulary and grammar acquisition. 271 – College Preparatory *21<sup>st</sup> Century Learner Expectation: Demonstrate cultural literacy*


### 253 SPANISH FOR HERITAGE LANGUAGE LEARNERS

 1.0 Credit

This course will provide native speakers with opportunities to enhance skills in Spanish, while exploring aspects of Spanish language and culture. Students will engage in reading and writing activities through the study of authentic literature and current events. This course is for native language speakers and may be a one-time substitution for either Spanish I, II, or III. *21<sup>st</sup> century learning expectations: Demonstrates cultural literacy*

*Prerequisite: Students will take a placement exam to ensure appropriate placement given their language skills.*

### 280 SPANISH IV HONORS

 1 credit

Spanish IV Honors is an intensive study of Spanish language, history, and culture. Students will continue to hone their linguistic skills as they participate in a variety of communicative activities and assessments. Emphasis is placed on project and performance-based learning. Students are expected to be self-directed, self-motivated, and able to work effectively on both short and long term assignments. At the honors level, students will also continue to read, discuss, and interpret Spanish media; including newspaper and magazine articles, short stories, and novels. Cultural awareness of the Spanish-speaking world is further developed through research, discussion, and presentation. 280 – Spanish IV Honors *21<sup>st</sup> Century Learner Expectation: Demonstrate cultural literacy*

*Prerequisite: A minimum qualifying cumulative average of 75% in Spanish III and teacher recommendation.*



## WORLD LANGUAGES ELECTIVES

### **252 SPANISH CULTURE**

**0.5 credit**

This course is designed to introduce students to the history, customs, and traditions that comprise the Spanish-speaking world. Through research and project-based learning, students will investigate the similarities and differences of the various nations included in the Spanish-speaking world. Topics include: ancient civilizations, the environment, government, the culture of food, holidays and celebrations, and cultural artifacts. This course is appropriate for all students interested in learning more about the Spanish-Speaking world. 252 – Spanish Culture *21<sup>st</sup> Century Learner Expectation:*

*Demonstrate cultural literacy*



### **293 ADVANCED PLACEMENT SPANISH-LANGUAGE AND CULTURE**

**1 credit**

This course is designed for students who have successfully completed Spanish IV Honors or students who have demonstrated superior knowledge, use, and understanding of language and culture in Spanish III Honors. This course will continue to build proficiency in the three modes of communication: interpersonal, interpretive, and presentational. Students will read and analyze selected literary excerpts and be exposed to realia to increase their knowledge of Spanish language, history, and culture. Students will learn to evaluate and synthesize information from a variety of media sources. Students will respond verbally and in writing to culturally-contextualized concepts, themes, and ideas presented in class. This course prepares students to take the AP Spanish Language and Culture exam at the end of senior year. Course will be conducted exclusively in Spanish. *A summer project is required. 21<sup>st</sup> century learning*

*expectations: Demonstrates cultural literacy*

*Prerequisite: Participation in this course is by teacher recommendation.*

### **254 CONVERSATIONAL SPANISH**

**0.5 Credit**

Students will develop speaking and listening skills for non-native Spanish speakers. The course focuses on vocabulary, pronunciation skills, and basic sentence patterns. Students will participate in a variety of scenarios designed to mimic common daily interactions and situations. Skills acquired during this course will be directly applicable to life beyond the classroom. *21<sup>st</sup> century learning expectations:*

*Demonstrates cultural literacy*

*Prerequisite: Successful completion of Spanish II.*

# MATHEMATICS

## MISSION STATEMENT

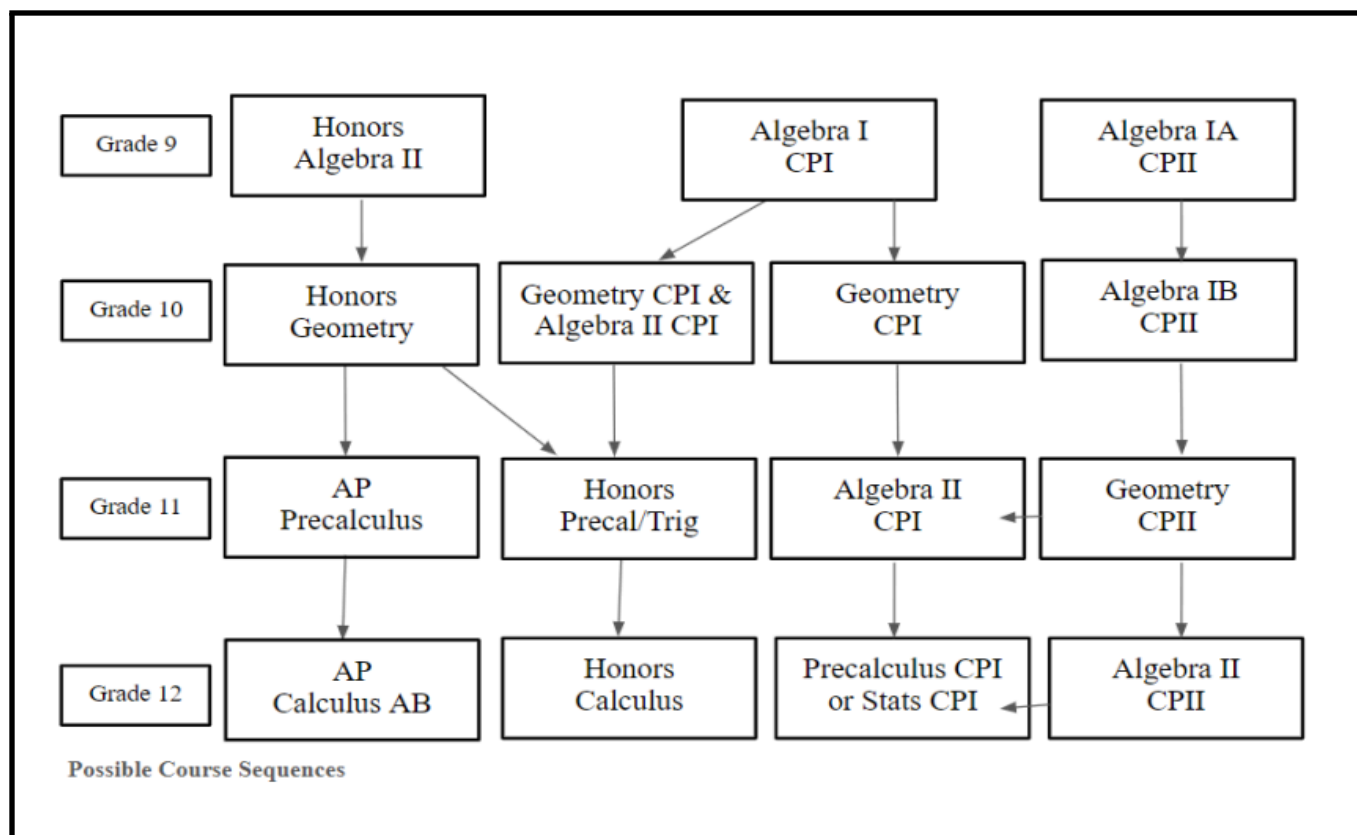
The Dracut High School Mathematics Department is committed to challenging all students with a rigorous curriculum within a safe, healthy and positive environment. The mathematics department believes in promoting personal responsibility, self-respect, tolerance and integrity while preparing all students for 21<sup>st</sup> century success. Students will be able to apply their mathematical knowledge and skills to identify and solve real world problems.

## 21<sup>st</sup> CENTURY LEARNER EXPECTATIONS

The Dracut High School mathematics student is able to do the following:

- listen actively and critically
- write effectively
- read, view, and respond appropriately to media
- use a variety of methods to analyze or solve problems
- demonstrate technological literacy, be able to use technology effectively and responsibly
- demonstrate financial/business literacy
- behave in a socially responsible manner
- demonstrate and understand civic responsibility regarding issues in the community and world.

**Notes to assist in course selection:** All students are required to pass three (3) units of mathematics during their four years at Dracut High School.



\* Prerequisite for honors level: B average in preceding honors course and department approval.

\*\*CPI students who decide that they may want to take the calculus course their senior year and take Algebra I their freshman year must double up their SOPHOMORE year and take both Algebra II & Trig and Geometry, enabling them to take Pre-Calculus their junior year.

### 313 ALGEBRA I CPI



1 Credit

Algebra I Common Core formalizes and extends the mathematics students learned in the middle grades. Students increase their mathematical literacy, problem solving, and critical thinking skills by engaging in collaborative and independent learning activities. The course explores linear, quadratic and exponential expressions and functions. Students interpret functions graphically, numerically, symbolically and verbally and translate between representations. This course includes the study and contrast of linear and exponential relations, solutions to systems of equations and inequalities and methods for analyzing, solving and understanding quadratic functions and the communication of algebraic processes. 313 – College Preparatory I. **21<sup>st</sup> Century Learner Expectations: Speak and write effectively; Read, view and interpret a variety of media effectively; Demonstrate financial/business literacy; Utilize an array of methods to research, analyze and problem solve; Use technology effectively and responsibly.**

*Prerequisite: students who have successfully completed Pre-Algebra along with a qualifying score on the placement test and teacher recommendation*

### 326 ALGEBRA IA CPI

1 Credit

Algebra I Common Core reinforces and extends the mathematics students learned in the middle grades. Students increase their mathematical literacy, problem solving, and critical thinking skills by engaging in collaborative and independent learning activities. The course explores linear, quadratic and exponential expressions and functions. Students interpret functions graphically, numerically, symbolically and verbally and translate between representations. This course includes the study and contrast of linear and exponential relations, solutions to systems of equations and inequalities and methods for analyzing, solving and understanding quadratic functions and the communication of algebraic processes. 326 - College Preparatory CPII. **21<sup>st</sup> Century Learner Expectations: Speak and write effectively; Read, view and interpret a variety of media effectively; Demonstrate financial/business literacy; Utilize an array of methods to research, analyze and problem solve; Use technology effectively and responsibly.**

*Prerequisite: students who have completed a Pre-Algebra course of study along with teacher and departmental recommendation*

### 327 ALGEBRA IB CPI

1 Credit

This course focuses on reinforcing the foundations for a high school Geometry course, including a comprehensive review of major algebraic concepts such as solving, graphing, and writing linear equations, exponents, and factoring. Topics will transition to an introduction of essential geometry concepts and skills that students need to be successful in a complete formal geometry course. 327 - College Preparatory CPII. **21<sup>st</sup> Century Learner Expectations: Speak and write effectively; Read, view and interpret a variety of media effectively; Demonstrate financial/business literacy; Utilize an array of methods to research, analyze and problem solve; Use technology effectively and responsibly.**

*Prerequisite: students who have completed a Algebra IA along with teacher and departmental recommendation*

### 311 ALGEBRA II H



1 Credit

This advanced algebra course provides students with a strong Algebra II course and prepares students for geometry and pre-calculus courses. Algebra I skills are reviewed and maintained as new concepts are presented. 311 – Honors *Freshmen level course*. **21<sup>st</sup> Century Learner Expectations:** *Speak and write effectively; Read, view and interpret a variety of media effectively; Demonstrate financial/business literacy; Utilize an array of methods to research, analyze and problem solve; Use technology effectively and responsibly.*

### 312 ALGEBRA II CPI



1 Credit

This advanced algebra course provides students with a strong Algebra II course and prepares students for geometry and pre-calculus courses. Algebra I skills are reviewed and maintained as new concepts are presented. 312 – College Preparatory I *Junior level course*. **21<sup>st</sup> Century Learner Expectations:** *Speak and write effectively; Read, view and interpret a variety of media effectively; Demonstrate financial/business literacy; Utilize an array of methods to research, analyze and problem solve; Use technology effectively and responsibly.*

### 321 GEOMETRY H / 324 GEOMETRY CPI



1 Credit

This geometry course provides students with a complete formal geometry course. The text builds and connects synthetic, coordinate and transformational approaches, as well as three-dimensional geometry. Students learn the skills they need to better understand a wide range of proofs by emphasizing reasoning, logic, writing arguments and analyzing arguments. 321–Honors / 324–College Preparatory I. **21<sup>st</sup> Century Learner Expectations:** *Speak and write effectively; Read, view and interpret a variety of media effectively; Demonstrate financial/business literacy; Utilize an array of methods to research, analyze and problem solve; Use technology effectively and responsibly.*

### 325 GEOMETRY CPII

1 Credit

This geometry course provides students with a complete formal geometry course. The text builds and connects synthetic, coordinate and transformational approaches, as well as three-dimensional geometry. Students learn the skills they need to better understand a wide range of proofs by emphasizing reasoning, logic, writing arguments and analyzing arguments. 325 – College Preparatory. **21<sup>st</sup> Century Learner Expectations:** *Speak and write effectively; Read, view and interpret a variety of media effectively; Demonstrate financial/business literacy; Utilize an array of methods to research, analyze and problem solve; Use technology effectively and responsibly.*

### 328 ADVANCED PLACEMENT PRECALCULUS



1 Credit

AP Precalculus provides students with an understanding of the concepts of college algebra, trigonometry, and additional topics that prepare students for further college-level mathematics courses. This course explores a variety of function types and their applications - polynomial, rational, exponential, logarithmic, trigonometric, polar, parametric, vector-valued, implicitly defined, and linear transformation functions using matrices. Students are required to take the advanced placement Precalculus examination. **21<sup>st</sup> Century Learner Expectations:** *Speak and write effectively; Read, view and interpret a variety of media effectively; Demonstrate financial/business literacy; Utilize an array of methods to research, analyze and problem solve; Use technology effectively and responsibly.* 325 – College Preparatory. *\*Prerequisite: Summer work is required*

### 331 PRECALCULUS/TRIGONOMETRY H



1 Credit

This is a comprehensive study of those concepts and operations necessary for calculus and will include polynomials, functions and their inverses; also included are trigonometry, complex numbers, logic, sequences, series, mathematical induction, and probability and statistics. 331 - Honors. *21<sup>st</sup> Century Learner Expectations: Speak and write effectively; Read, view and interpret a variety of media effectively; Demonstrate financial/business literacy; Utilize an array of methods to research, analyze and problem solve; Use technology effectively and responsibly.*

### 334 PRECALCULUS A CPI



1 Credit

This course begins with a review of linear algebra and continues with the study of linear and quadratic function, polynomial inequalities, transformations, and exponential and logarithmic functions; also included are an introduction to trigonometric functions and equations, trigonometric identities, and applications of these concepts to solve practical problems. *Junior or Senior level course.* 334 – College Preparatory I. *21<sup>st</sup> Century Learner Expectations: Speak and write effectively; Read, view and interpret a variety of media effectively; Demonstrate financial/business literacy; Utilize an array of methods to research, analyze and problem solve; Use technology effectively and responsibly.*

### 335 ALGEBRA II CPII

1 Credit

This course is based on the themes of data analysis, modeling and functions through which students will investigate the following topics: systems of equations, factoring, complex numbers, probability and statistics. Students will also study polynomial, exponential and logarithmic functions. *Junior level course.* 335 – College Preparatory II. *21<sup>st</sup> Century Learner Expectations: Speak and write effectively; Read, view and interpret a variety of media effectively; Demonstrate financial/business literacy; Utilize an array of methods to research, analyze and problem solve; Use technology effectively and responsibly.*

### 339 STATISTICS – CPI



1 Credit

This college preparatory course provides students with an introduction to the major concepts used in the field of applied statistics. Students will be exposed to the tools for collecting, analyzing, drawing conclusions from data, and making predictions. This course covers topics such as measures of central tendency, standard deviation, combinations and permutations, probability, sampling, and various distributions. Emphasis is on applications of statistical concepts. College Preparatory I. *21<sup>st</sup> Century Learner Expectations: Speak and write effectively; Read, view and interpret a variety of media effectively; Demonstrate financial/business literacy; Utilize an array of methods to research, analyze and problem solve; Use technology effectively and responsibly.*

*Prerequisite: C or higher in Algebra II CPI or B or higher in Algebra II CPII*

### 341 CALCULUS - HONORS



1 Credit

This course provides students with a foundation in analytic geometry, differential and integral calculus. Topics include functions and limits, differentiation, integration, logarithmic, exponential and trigonometric functions, and the application of calculus techniques. Use of technology will also be explored. 341 - Honors. *21<sup>st</sup> Century Learner Expectations: Speak and write effectively; Read, view and interpret a variety of media effectively; Demonstrate financial/business literacy; Utilize an array of methods to research, analyze and problem solve; Use technology effectively and responsibly.*

*Prerequisite: B average in Pre-Calculus and Department approval.*

### 346 SURVEY OF MATHEMATICS

1 Credit

This course provides comprehensive coverage of concepts and skills that students need to be successful in a college algebra course or in a career. Students will review math concepts previously covered in prior mathematics courses utilizing practical applications. Students will use technology to enhance understanding of concepts. The Survey of Mathematics is open to only Seniors who have successfully completed Algebra I and Geometry. The TI 83+ or TI 84+ graphing calculator will be used to enhance understanding of concepts. Students are encouraged to purchase their own graphing calculators. Preparation for college placement exams or career placement exams will be integrated into the classwork. 346 – College Preparatory II. **21<sup>st</sup> Century Learner Expectations:** *Speak and write effectively; Read, view and interpret a variety of media effectively; Demonstrate financial/business literacy; Utilize an array of methods to research, analyze and problem solve; Use technology effectively and responsibly.*

*Prerequisite: Algebra I and Geometry. Seniors only.*

### 351 ADVANCED PLACEMENT CALCULUS AB



1 Credit

This college level course provides students with the foundation in differential and integral calculus. Topics include functions and limits, differentiation, integration, improper integrals, the Fundamental Theorem of Calculus, Riemann sums, and slope field. Use of technology and applications of calculus techniques will also be explored. Students are required to take the advanced Placement Calculus AB examination. 351 – Advanced Placement. **21<sup>st</sup> Century Learner Expectations:** *Speak and write effectively; Read, view and interpret a variety of media effectively; Demonstrate financial/business literacy; Utilize an array of methods to research, analyze and problem solve; Use technology effectively and responsibly.*

*Prerequisite: B average in Honors Pre-calculus and Department approval or A average in Pre-calculus/trigonometry CPI and department approval. Summer work is required.*

### 353 ADVANCED PLACEMENT/DUAL ENROLLMENT STATISTICS



1 Credit

This college level course provides students with an introduction to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students will be exposed to four broad conceptual themes: Exploring data through describing patterns as departure from them, sampling and experimentation through planning and conducting a study, anticipating patterns through exploring phenomena using probability and statistical inference by estimating population parameters and testing hypotheses. Students who opt to enroll in the Dual Enrollment Statistics course simultaneously with the AP Statistics course will earn 3 college credits from Middlesex Community College upon successful completion of the course regardless of their score on the AP Exam. *A passing score on the Accuplacer exam allows students to register for college credit from Middlesex Community College (MCC) in addition to earning high school credit for this course. Students are responsible for the cost associated with the credits earned from MCC.* 353 – Advanced Placement/Dual Enrollment. **21<sup>st</sup> Century Learner Expectations:** *Speak and write effectively; Read, view and interpret a variety of media effectively; Demonstrate financial/business literacy; Utilize an array of methods to research, analyze and problem solve; Use technology effectively and responsibly.*

*Prerequisite: This course is available to juniors and seniors who have successfully completed Algebra II and by Departmental approval. Summer work is required.*

### 355 COMPUTER SCIENCE: Web Development and Animation



½ credit

Students will gain an understanding of the digital age we live in and the tools that power it. This course will appeal to students who are considering a career in engineering or who simply want to explore the mysteries of the digital universe, this course will equip students with the fundamental knowledge and

skills needed to thrive in the 21st century. 355 – Computer Science: Web Development and Animation. ***21<sup>st</sup> Century Learner Expectations: Speak and write effectively; Read, view and interpret a variety of media effectively; Demonstrate financial/business literacy; Utilize an array of methods to research, analyze and problem solve; Use technology effectively and responsibly.***

*Prerequisite: This course is open to all students. Successful completion of Gaming and Music Programming is recommended.*

### **329 COMPUTER SCIENCE: Machine Learning and AI**



**½ credit**

Computer Science Machine Learning and AI provides students the opportunity to embrace challenges, and become a part of a community of problem solvers and innovators. Computer science is a skill, a mindset, and a gateway to shaping the future. Students will learn to code, develop software, and tackle real-world problems using the tools and languages of the trade. Students will use Code.org’s AI Lab environment to train machine learning models, then import their models into App Lab to create apps that solve problems. ***21<sup>st</sup> Century Learner Expectations: Speak and write effectively; Read, view and interpret a variety of media effectively; Demonstrate financial/business literacy; Utilize an array of methods to research, analyze and problem solve; Use technology effectively and responsibly.***

*Prerequisite: This course is open to all students. Successful completion of Gaming and Music Programming is recommended.*

# SCIENCE, TECHNOLOGY AND ENGINEERING

## MISSION STATEMENT

The mission of the Dracut High School Science, Technology and Engineering department is to enable each student to develop a strong foundation of understanding and appreciation of the natural and physical sciences. Students will be prepared to examine and clarify scientific values, make appropriate decisions for improving individual quality of life and success in our ever increasing scientific and technological world.

All courses are standards based in content and science practices. Through aligned curricula, student centered learning and collaboration, students gain knowledge and understanding to problem solve, analyze information, communicate ideas clearly, use appropriate technology and tools responsibly as well as design and perform scientific investigations. All STE courses are laboratory based. Students are required to pass science MCAS as one of their graduation requirements. Students planning on attending a 4 year college should consider taking the three foundational science courses as recommended by most colleges.

## STUDENT EXPECTATIONS

*The Dracut High School Student will:*

- Write effectively
- Read, review, and interpret a variety of media effectively
- Use technology effectively and responsibly
- Use an array of methods to research, analyze and problem solve
- Promote civic responsibility regarding issues facing our community and the world today

## NOTES TO ASSIST IN SELECTING COURSES:

- Three units of science are required for graduation.
- Students interested in enrolling in AP courses as a sophomore should consult with their teacher and obtain approval through the department chairperson.
- Students may also enroll in PLTW Engineering Courses.



## Dracut High School STE Department 2023-2024

### Curriculum Sequence Examples

<b><u>TRADITIONAL</u></b>			
<b>Grade 9</b> Biology	<b>Grade 10</b> Integrated Science Chemistry STE Elective	<b>Grade 11</b> Chemistry Physics STE Elective	<b>Grade 12</b> Chemistry Physics STE Elective
<b><u>ACCELERATED</u></b>			
<b>Grade 9</b> Honors Biology	<b>Grade 10</b> Honors Chemistry AP Biology DE AP Environmental Science	<b>Grade 11</b> Honors Physics AP Physics I AP Biology DE AP Chemistry AP Environmental Sci.	<b>Grade 12</b> AP Physics I AP Physics C AP Biology/DE AP Chemistry AP Environmental Sci.
<b><u>STE ELECTIVES</u></b>			
<b>Grade 9</b> PLTW Intro Engineer Design Intro to Technology	<b>Grade 10</b> Anatomy & Physiology Biotechnology Environmental Science Intro to Technology Marine Biology PLTW Intro Eng. Design PLTW Prin. of Eng. PLTW Human Body Systems PLTW Prin. of Biomed Sci.	<b>Grade 11</b> Anatomy & Physiology Biotechnology Environmental Science Intro to Technology Marine Biology PLTW Intro Eng. Design PLTW Prin. of Eng. PLTW Human Body Sys. PLTW Prin. of Biomed Sci. PLTW Aerospace Engineering	<b>Grade 12</b> Anatomy & Physiology Biotechnology Environmental Science Intro to Technology Marine Biology PLTW Intro Eng. Design PLTW Prin. of Eng. PLTW Human Body PLTW Prin. of Biomed. Science PLTW Aerospace Eng.

### FOUNDATION SCIENCES

#### 421-423 BIOLOGY



**1 credit**

This is a literacy based survey course introducing students to life on Earth through investigation, experimentation, and problem solving. Students will study the chemistry of life, cell biology, ecology, genetics, evolution and biodiversity as well as human anatomy and physiology. This course provides all 9<sup>th</sup> grade students with the foundation to make scientifically informed decisions related to their health and that of the planet. It also provides the basis for other life science electives. All students must take this course and take the Biology MCAS (Massachusetts Comprehensive Assessment System).

421 - Honors / 423 - College Preparatory I. ***21<sup>st</sup> Century Learner Expectation: Utilize an array of methods to research, analyze, and problem solve.***

*Prerequisite Honors - recommendation from Grade 8 science teacher. Students should have a B+ or higher average in 8th grade science.*

#### 443 INTEGRATED SCIENCE CPI



**1 credit**

Integrated Science provides a foundation in the study of Life and Physical Sciences. Students will be expected to develop an understanding of fundamental course concepts through teacher-guided inquiry that includes hands-on activities, laboratory investigations, and teacher demonstrations. ***21<sup>st</sup> Century Learner Expectation: Utilize an array of methods to research, analyze, and problem solve.***

*Prerequisites: Students must have earned a passing grade in Biology*

**431 CHEMISTRY H / 432 CHEMISTRY CPI**

Chemistry examines the composition, structure, and properties of matter, and the changes that matter undergoes. Students will practice new laboratory techniques and problem solving skills through laboratory experimentation. Students will study the following chemical concepts with emphasis on appropriate mathematical skills: atomic structure and bonding, periodicity, gasses, solutions, and chemical reactions. Chemical concepts are explored and related to everyday living. 431 - Honors / 432- College Preparatory I. **21<sup>st</sup> Century Learner Expectation: Utilize an array of methods to research, analyze, and problem solve.**

*Prerequisites: Chemistry CPI - Minimum grade of C or higher in Algebra I / Chemistry Honors - Minimum grade of C or higher in Honors Biology, minimum grade of B or higher in Integrated Science, minimum grade of B or higher in Algebra I or passing grade in Algebra II.*

**441 PHYSICS H / 442 PHYSICS CPI**

Physics provides the student with a clear and logical introduction to the basic concepts and principles of mechanics. Mechanics is concerned with the motion of material objects. A broad range of interesting applications to real world phenomena will be presented to strengthen the principles presented. The course will provide a conceptual introduction to topics, followed by mathematical analyses. Laboratory experiments, many technology based, are introduced to aid the student in developing systematic thinking and precision. Students should have successfully completed Algebra I. 441 - Honors / 442 - College Preparatory I. **21<sup>st</sup> Century Learner Expectation: Utilize an array of methods to research, analyze, and problem solve.**

*Prerequisite: Honors - Minimum grade of C or better in Honors Chemistry or minimum grade of B or higher in Integrated Science / CPI Physics - Minimum grade of C or higher in Chemistry or a minimum grade of B or higher in Integrated Science*

**ADVANCED PLACEMENT ELECTIVES**

*Summer work is required of all science AP courses. Students are expected to attend a minimum of 3 study sessions run by individual instructors outside of school hours. The required AP Exam by the College Board is administered in May each year. Qualifying AP Scores may provide students with college credit at various institutions of higher learning.*

**445 ADVANCED PLACEMENT PHYSICS I**

AP Physics I is equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves and sound. It also introduces electric circuits. No prior course work in physics is necessary for students to enroll in AP Physics I. Students should have completed Geometry and be concurrently taking or have completed PreCalculus. Although the Physics I course includes basic use of trigonometric functions, this understanding can be gained either in the concurrent math course or in the AP Physics I course itself. 445 – Advanced Placement. **21<sup>st</sup> Century Learner Expectation: Utilize an array of methods to research, analyze, and problem solve.**

*Prerequisite: Recommendation from a current core science class, final grade of “B-“ in Honors Algebra II and department approval. Summer work required.*

#### 449 ADVANCED PLACEMENT PHYSICS C: MECHANICS



1 credit

This course is designed for students who wish to pursue college level physics. The following topics are explored in depth: motion, forces, energy, momentum, rotation, equilibrium, and gravitation. The use of calculus in problem solving and in derivations increases as the course progresses. Students will engage in laboratory experiences, many of which are technology based, to reinforce the fundamental principles presented. Students are required to take the Advanced Placement Physics C-Mechanics Examination. This course is recommended for students wishing to pursue science or engineering majors in college.

449 - Advanced Placement. **21<sup>st</sup> Century Learner Expectation: Utilize an array of methods to research, analyze, and problem solve.**

*Prerequisite: A final grade of B- in Honors Physics or concurrent enrollment in AP Calculus and department approval. Summer work required.*

#### 439 ADVANCED PLACEMENT CHEMISTRY



1 credit

This course is designed for students who wish to pursue college level chemistry. Students will attain an understanding of the fundamentals of chemistry, building from the subatomic to the macroscopic level. The topics covered will place emphasis on chemical calculations and formulation of principles. Laboratory experimentation is integral to the course. Students will study structure of matter, kinetic theory of gasses, chemical equilibrium, chemical reactions, and thermochemistry. Students are required to take the Advanced Placement Examination. It is recommended to students wishing to pursue engineering/science majors in college. 439 - Advanced Placement. **21<sup>st</sup> Century Learner Expectation: Utilize an array of methods to research, analyze, and problem solve.**

*Prerequisite: Recommendation from Honors Chemistry instructor and successful completion of Algebra II. Summer work required.*

#### 452 ADVANCED PLACEMENT/DUAL ENROLLMENT BIOLOGY



1 credit

This course is designed to offer students a solid foundation in introductory college-level biology with emphasis on enduring and conceptual understandings, spending. Students develop an appreciation for the study of life and the unifying principles within a diversified biological world. Students will pose questions, design experiments and collect/analyze data to better understand the biological world around them. Mathematical modeling, working with case studies and current events will also allow students to connect learning to their everyday life. The problem solving and analytical skills they develop will allow them to better understand complex biological issues that could potentially impact their lives. Students who opt to enroll in Dual Enrollment Biology will earn college credit from Middlesex Community College upon successful completion of the course regardless of their score on the AP exam. 452 - Advanced Placement. **21<sup>st</sup> Century Learner Expectation: Utilize an array of methods to research, analyze, and problem solve.**

*Prerequisite: Recommendation from Honors Biology instructor with at least a "B-" in Honors Biology and Chemistry, or concurrent enrollment in Honors Chemistry and department approval. Summer work required.*

#### 469 ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE

1 credit

This course is designed to be the equivalent of a one-semester introductory college course in environmental science. Students will engage with the scientific principles, concepts, and methodologies required to understand the interrelationships within the natural world. The course requires students to identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or

preventing them. Interdisciplinary in nature, the course covers topics in sustainability, earth systems, populations, health and toxicity, land and water use, energy resources and consumption, pollution, environmental justice and global change. Students will engage in hands-on, inquiry-based laboratory and/or fieldwork investigations. Students are expected to take the Advanced Placement Exam. 469 – Advanced Placement . **21<sup>st</sup> Century Learner Expectation: Utilize an array of methods to research, analyze, and problem solve.**

*Prerequisite: Recommendation from current science instructor; a “B-“ in Honors Biology, Chemistry, and department approval. Summer work required.*

## SCIENCE, TECHNOLOGY AND ENGINEERING ELECTIVES

### 453 ANATOMY & PHYSIOLOGY - HONORS



**1 credit**

This is a full year course designed to introduce students to the structure and function of the human body and how body systems work together to maintain homeostasis. Topics will include the skeletal, muscular, endocrine and nervous systems, cardiovascular and respiratory, digestive and excretory systems. Course work includes case studies, laboratory activities, and independent research work. The course also provides opportunities for students to practice their analytical and critical thinking skills and promote scientific literacy. 453 - Honors. **21<sup>st</sup> Century Learner Expectation: Utilize an array of methods to research, analyze, and problem solve.**

*Prerequisite: Successful completion of Biology and Chemistry is recommended. Open to students in grades 10-12.*

### 462 MARINE BIOLOGY



**½ credit**

Marine Biology is a study of the relationship between the biological and physical aspects of the oceanic world. The topics include the following: marine mammals, fish, coral reefs, beaches, tides, currents, and topography. Throughout the course, the beneficial and ethical interactions between humans and the marine world are emphasized. 462 - College Preparatory I. **21<sup>st</sup> Century Learner Expectation: Utilize an array of methods to research, analyze, and problem solve.**

*Prerequisite: Successful completion of Biology is recommended. Open to students in grades 10-12.*

### 463 ENVIRONMENTAL SCIENCE

**½ credit**

Drinking water, garbage, heat and electricity are no longer simply facts of life. Environmental protection, conservation and preservation require an enlightened public and workforce trained to balance the needs of society with the needs of the environment. This course will familiarize the students with a wide range of current environmental topics, including water, air and soil analysis, recycling, forestry, and solid waste management. 463 - College Preparatory. **21<sup>st</sup> Century Learner Expectation: Utilize an array of methods to research, analyze, and problem solve.**

*Prerequisite: Successful completion of Biology is recommended. Open to students in grades 10-12.*

### 464 BIOTECHNOLOGY



**½ credit**

Do you want to explore the latest in DNA fingerprinting or gel electrophoresis to solve a crime or diagnose a disease condition? Do you wonder how scientists investigate new emerging diseases and develop therapies and vaccines to combat novel viruses? Are you interested in learning more about genetically modified organisms such as “GloFish” or “Flavr Savr” tomatoes or how we can program bacteria cells to make proteins like insulin or silk? Learn how synthetic biologists apply engineering principles and extend genetic engineering techniques to construct new genetic systems. This course will provide an overview of GMO’s (food products), medical therapeutics (disease diagnosis and

prevention), recombinant proteins (food, textile, paper and industrial applications), bioremediation (identifying and cleaning toxins in the environment), ethics, DNA fingerprinting (CSI). In addition to traditional biotechnology equipment and apparatus used in the laboratory, BioBuilder modules used will give students hands-on experience with cutting edge science of this expanding field. Students will acquire the foundation to go on to further study in certificate programs or degree programs in bioengineering. 464-College Preparatory. **21<sup>st</sup> Century Learner Expectation: Utilize an array of methods to research, analyze, and problem solve.**

*Prerequisite: Successful completion of Biology, Chemistry, and Algebra I is recommended. Open to students in grades 10-12.*

#### **471 INTRODUCTION TO ENGINEERING DESIGN (PLTW) - HONOR 1 credit**

This Project Lead the Way course is designed for students who would like to study engineering and have a solid understanding of concepts in Algebra I. Students explore the engineering design process by applying mathematics, science, and engineering concepts to create hands-on projects. Students work individually and in teams to design solutions to a variety of problems using 3D modeling software, document their work in an engineering notebook. Upon successful completion of an end of year exam students may have the opportunity to apply for college credit. 471 – Honors. **21<sup>st</sup> Century Learner Expectation: Utilize an array of methods to research, analyze, and problem solve.**

*Prerequisite: Open to students in grades 9-12.*

#### **472 PRINCIPLES OF ENGINEERING (PLTW) - HONORS 1 credit**

This Project Lead the Way course is designed for students who may be considering an engineering future. Through problems that engage and challenge, students explore a broad range of engineering topics, including mechanisms, the strength of structures and materials, and automation. Students develop skills in problem solving, research, and design while learning strategies for design process documentation, collaboration, and presentation. Upon successful completion of an end of year exam students may have the opportunity to apply for college credit. 472 – Honors. **21<sup>st</sup> Century Learner Expectation: Utilize an array of methods to research, analyze, and problem solve.**

*Prerequisite: Successful completion of Algebra II or enrolled concurrently. Open to students in grades 10-12.*

#### **475 AEROSPACE ENGINEERING (PLTW) - HONORS 1 credit**



Aerospace Engineering (AE) educates students in the fundamentals of atmospheric and space flight. Fundamentals of flight in air and space are explored as students design and test components related to flight including airfoil, propulsion system, and rocketry. Orbital mechanics concepts are studied by creating models using industry-standard software. Aerospace concepts are also applied to alternative applications such as a wind turbine and parachute. Students simulate planetary exploration, robotic exploration. Upon successful completion of an end of year exam students may have the opportunity to apply for college credit. 475 – Honors. **21<sup>st</sup> Century Learner Expectation: Utilize an array of methods to research, analyze, and problem solve.**

*Prerequisite: Successful completion of Algebra II. IED, POE, or Physics are also recommended, but not required. This course is recommended for students in grades 10-12.*

#### **476 PRINCIPLES OF BIOMEDICAL SCIENCE (PLTW) - HONORS 1 credit**



In this PLTW course, students explore concepts of biology and medicine as they take on roles of different medical professionals to solve real-world problems. They develop not just technical skills, but also in-demand, transportable skills that they need to thrive in life and career. Students are challenged in various scenarios including investigating a crime scene to solve a mystery, diagnosing and proposing

treatment to patients in a family medical practice, tracking down and containing a medical outbreak at a local hospital, stabilizing a patient during an emergency, and collaborating with others to design solutions to local and global medical problems. Upon successful completion of an end of year exam, students may have the opportunity to apply for college credit. ***21<sup>st</sup> Century Learner Expectation: Utilize an array of methods to research, analyze, and problem solve.***

*Prerequisite Honors: Open to students in grades 10-12.*

#### **477 HUMAN BODY SYSTEMS (PLTW) - HONORS**

**1 credit**

In this PLTW course, students examine the interactions of human body systems as they explore identity, power, movement, protection, and homeostasis in the body. Exploring science in action, students build organs and tissues on a skeletal Maniken®; use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration; determine the identity of a skeleton using both forensic anthropology and DNA analysis; and take on the roles of biomedical professionals to solve real-world medical cases. Upon successful completion of an end of year exam students may have the opportunity to apply for college credit. ***21<sup>st</sup> Century Learner Expectation: Utilize an array of methods to research, analyze, and problem solve.***

*Prerequisite Honors: Open to students in grades 10-12.*

#### **615 INTRODUCTION TO TECHNOLOGY**

**½ credit.**

Intro to Technology is a semester course designed to introduce students to major technological systems used in society along with the science and engineering practices needed to solve real world problems. Four areas of study as guided by the Massachusetts STE frameworks are: Engineering Design, Materials, tools and manufacturing, Technological systems, and Energy and power. The course emphasizes modeling, analyzing and interpreting data, designing solutions and communicating information. Students research solutions to real world problems and examine social and cultural impacts a product, material, manufacturing process or technology could have on the world. 615 – College Preparatory I. ***21<sup>st</sup> Century Learner Expectation: Utilize an array of methods to research, analyze, and problem solve.***

*Prerequisite: None. Open to students in grades 9-12.*

# COMPUTER AND BUSINESS TECHNOLOGY

## MISSION STATEMENT

The Computer and Business Technology offerings of Dracut High School are committed to providing our students the opportunity to master skills in current technology, acquire knowledge, and develop ethical behavior to help them achieve economic competency in their personal, business, and community life. We seek to encourage our students' awareness of career/college choices, and challenge students to use technology as an informational tool and to develop the skills required in a technology-based workplace.

## 21<sup>st</sup> CENTURY LEARNER EXPECTATIONS

**The Dracut High School Student will practice the following skills in Computer and Business Technology classes:**

- Listen actively and critically
- Write effectively
- Read actively and critically
- Read, view, and interpret a variety of media effectively
- Utilize an array of methods to research, analyze, and problem solve
- Use technology effectively and responsibly
- Promote civic responsibility regarding issues facing our community and the world
- Practice personal wellness and social responsibility

### 509 SPORTS AND ENTERTAINMENT MANAGEMENT

½ credit

This course will be designed for students interested in sports, entertainment, and event management. This course will provide an introduction into the business side of sports, entertainment, and event management. Topics of study will include: sociology, new media, marketing, law, economics, and event management. *21<sup>st</sup> Century Learner Expectation: Utilize an array of methods to research, analyze, and problem solve.*

### 510 INTRODUCTION TO MARKETING

½ credit

In this introductory course students will learn what it takes to sell a product or service. Students will learn the four P's of Marketing: Price, Product, Place, and Promotion. Students will explore product planning, branding strategies, various distribution channels, sales techniques, advertising, promotion and entrepreneurship. This course is designed to provide students with the fundamental knowledge, skills, attitudes, and behaviors necessary to succeed in the "real world", whether they go on to higher education or directly into the workforce. *This elective is open to freshmen and sophomores. 21<sup>st</sup> century learner expectation: utilize an array of methods to research, analyze, and problem solve.*

### 511 BUSINESS MANAGEMENT

½ credit

Students will be introduced to what it takes to be an effective business leader in today's global environment. Effective public speaking, the ability to write clear, concise memos, reports and letters, understanding group dynamics, the ability to motivate others in order to accomplish common goals, how and where to access current information (internet research, newspapers, television etc...) are some of the topics covered. Businesses compete not only with the company next door but with the company on the other side of the globe. As such, students will analyze local and foreign markets to determine where their competition is coming from and what to do about it. *This elective is open to juniors and seniors. 21<sup>st</sup> century learner expectation: utilize an array of methods to research, analyze, and problem solve.*

**512 INTRODUCTION TO PERSONAL AND BUSINESS LAW** **½ credit**

This is one of the most valuable courses anyone interested in Business can take. The cost and complexities of our legal system can cost a company a small fortune. Students will be introduced to our court system, focusing on civil and criminal trials. Students will research current legal cases using various forms of media (internet, newspapers, magazines etc...) and present those cases in both a written legal brief and oral presentation using PowerPoint. The goal is for our students (tomorrow's leaders) to make safe and smart decisions by knowing the contours of the judicial system. *This course is open to seniors and juniors. 21<sup>st</sup> century learner expectation: utilize an array of methods to research, analyze, and problem solve.*

**515 PERSONAL FINANCE AND BANKING** **½ credit**

In this course students will learn how to manage their finances. From writing a check, balancing their checkbook, figuring out interest rates to living on a budget in a simulated Webquest, students will learn all aspects of financial management. Being prepared financially to enter the workplace is even more important today since many companies will have a credit report done on you as part of their interview process. If you cannot manage your money why would they give you the responsibility to handle theirs? *This course is open to seniors, juniors and selected sophomores with prior approval. 21<sup>st</sup> century learner expectation: utilize an array of methods to research, analyze, and problem solve.*

**516 INTRO TO FINANCIAL SERVICES (formerly Banking II)** **½ credit**

This course will include the basic principles and practices of credit unions and the financial industry. Students will be exposed to accounting and banking technology clerical and bank office tasks, as they develop confidence under the guidance of a credit union professional. Students will learn employable skills including cash handling, member service interaction, organization and teamwork. This authentic learning permits the students to explore hands-on, real-life situations and problem solving coupled with independent practice. *21<sup>st</sup> century learner expectation: use technology effectively and responsibly use technology effectively and responsibly.*

*Prerequisite: Must have received a grade of "B" or better in Personal Finance and Banking or any Accounting course or a recommendation from a teacher.*

**520 DUAL ENROLLMENT INTRO TO BUSINESS HONORS** **1 credit**

Introduction to Business is a Dual Enrollment course with Middlesex Community College. It is an Honors level course. It is the study of the foundational principles of the business world. Topics include economic systems, ethics and social responsibility, forms of business ownership, type of organizations, and the functions of accounting, finance, management, and marketing. *21<sup>st</sup> century learner expectation: use technology effectively and responsibly use technology effectively and responsibly.*

**530 ACCOUNTING** **½ credit**

Introduction to Accounting will give the student a thorough background in the basic accounting procedures used to operate a business. Special emphasis is placed on vocabulary and accounting concepts. Students will learn accounting software that is integrated within the textbook. The accounting procedures presented will also serve as a sound background for employment in office jobs and preparation for advanced study in Business and Accounting courses. Introduction to Accounting is a prerequisite to taking further accounting courses. *Recommended for sophomores, juniors and seniors. 21<sup>st</sup> century learner expectation: use technology effectively and responsibly, utilize an array of methods to research, analyze, and problem solve.*



**540 COLLEGE PLANNING AND TRANSITION****½ credit**

This course is designed to provide students with a foundation for learning about various career opportunities. To assist students in making career choices, career assessment and decision-making tools will be used in the classroom. Students will learn professional skills such as resume writing, interviewing techniques, and how to apply for jobs. Additionally, students learn how to research potential careers using job-related internet resources. Guest speakers from various careers will be invited into the classroom to discuss career options and paths. *Recommended for juniors and seniors. 21st century learner expectation: utilize an array of methods to research, analyze, and problem solve; use technology effectively and responsibly.*

**561 DIGITAL APPLICATIONS****½ credit**

This course will teach students skills necessary for the 21st century world. Students will learn Microsoft Office, Google Apps and other web based resources. Students will expand their current technological skills and develop new expertise in digital tools. Topics include creating a digital portfolio, digital citizenship, technology operations, and information fluency. *Recommended for all levels. 21st century learner expectation: utilize an array of methods to research, analyze, and problem solve; use technology effectively and responsibly.*

**564 GAMING AND MUSIC PROGRAM****½ credit**

This course is for students interested in creating online games and/or their own music. Using a free program created by MIT called “Scratch” you will create animation, games, and other programs by “clicking together” programming constructs represented as building blocks. “Scratch” emphasizes the practical learning of fundamental computer science concepts and at the same time supports the idea of fostering creativity in computer science classes. *This course is open to all students. 21st century learner expectation: utilize an array of methods to research, analyze, problem solve and use technology effectively and responsibly.*

**517 FOUNDATIONS OF BUSINESS****½ credit**

This is an introductory course into the world of business. Students will be introduced to all aspects of business such as: Management, Human Resources, Strategy, Information Management, Operations, Business Models, Competition, Trends, Capitalism, Business Ownership, Economic Concepts (including Supply & Demand and GDP), Pricing, Private Enterprise, Entrepreneurship, Small Business Risks of Ownership, Government and Business, Workers Rights, etc. (Recommended grades 9, 10) *21st Century Learner Expectations: use an array of methods to research, analyze, and problem solve; use technology effectively and responsibly.*

**533 ENTREPRENEURSHIP****½ credit**

Entrepreneurship focuses on identifying business opportunities, developing a business plan, including start-up establishment, management, team-building, market strategies, human resource management, leadership, innovation, intellectual property, economy, networking, market research, etc. The course may include an entrepreneur simulation and group activities. It will culminate with the development of a complete pitch deck for presentation to the class. *21st Century Learner Expectations: use an array of methods to research, analyze, and problem solve; use technology effectively and responsibly.*

# FINE AND PERFORMING ARTS

## MUSIC

### MISSION STATEMENT

The Music program is designed to introduce and enhance the performing and understanding of music in the world today. The program will also help students who specifically wish to pursue a career in the field of music (performing, writing, teaching, or directing). Students will be introduced to different styles and forms of music. They will have the opportunity to participate in band, chorus or orchestra and perform publicly, or compete in music contests.

Course #	Title/Level	Grades	Credits
822	Chorus	9 - 12	½ credit
823	Chorus	9 - 12	1 credit
824	Show Choir	10 - 12	1 credit
831	Concert/Marching Band	9 - 12	1 credit
832	Concert Band (for color guard members)	9 - 12	¾ credit
833	String Orchestra	9 - 12	1 credit
835	Jazz Band	9 - 12	½ credit
836	Color Guard	9 - 12	¼ credit
840	Music Theory I	9 - 12	½ credit
841	Music Theory II	9 - 12	½ credit
844	Music Technology I	9 - 12	½ credit
846	Music Appreciation	9 - 12	½ credit
847	Introduction to Theater	9 - 12	½ credit

### 823 CHORUS

**1 credit**

Chorus is open to all interested students of varied vocal talents and abilities. In addition to learning how to read music and singing a variety of songs, students prepare for public performances and assemblies. Participation in public performances is required of all enrollees. *Limited to 100 students. Students may earn up to 4 credits in this elective. 21<sup>st</sup> Century Learner Expectations- Read, view, and interpret a variety of media effectively; Demonstrate cultural literacy; Promote civic responsibility regarding issues facing our community and the world today; Practice personal wellness and social responsibility.*

### 824 SHOW CHOIR

**1 credit**

The Show Choir is an elite performing vocal group. Popular and standard musical numbers are rehearsed and performed, often enhanced by choreography. *Auditions are open to all students; admission by audition only. 21<sup>st</sup> Century Learner Expectations- Read, view, and interpret a variety of media effectively; Demonstrate cultural literacy; Promote civic responsibility regarding issues facing our community and the world today; Practice personal wellness and social responsibility.*

### 831 CONCERT BAND/ MARCHING BAND

**1 credit**

The Concert/Marching Band affords students the opportunity of performing and gaining musical experience on various instruments. During the football season and for various spring parades, these students perform as a marching unit. The Concert Band allows students to perform various musical styles from the traditional band repertoire including marches and classical selections, as well as more

contemporary music. This course is open to all students who play an instrument. *Students may earn up to 4 credits in this elective. 21<sup>st</sup> Century Learner Expectations- Read, view, and interpret a variety of media effectively; Demonstrate cultural literacy; Promote civic responsibility regarding issues facing our community and the world today; Practice personal wellness and social responsibility.*

### **832 CONCERT BAND**

**½ credit**

For students enrolled in Color Guard. *21<sup>st</sup> Century Learner Expectations- Read, view, and interpret a variety of media effectively; Demonstrate cultural literacy.*

### **833 STRING ORCHESTRA**

**1 credit**

This course is for students who play violin, viola, cello or string bass. The group will learn to play orchestral music of different genres and perform at various concerts throughout the year. Students also participate in trips outside of school for adjudication and/or performances. *21<sup>st</sup> Century Learner Expectations- Read, view, and interpret a variety of media effectively; Demonstrate cultural literacy; Promote civic responsibility regarding issues facing our community and the world today; Practice personal wellness and social responsibility.*

### **836 COLOR GUARD**

**½ credit**

Students perform as part of the Marching Band during the fall season. No musical experience is required. Dancers are encouraged. *21<sup>st</sup> Century Learner Expectations- Read, view, and interpret a variety of media effectively; Demonstrate cultural literacy; Promote civic responsibility regarding issues facing our community and the world today; Practice personal wellness and social responsibility.*

### **840 MUSIC THEORY I**

**½ credit**

Students will learn the basic elements of writing and reading music. Development of SOLFEGE (listening and sight-reading skills) will be included in the course. *This course is offered to sophomores, juniors and seniors. 21<sup>st</sup> Century Learner Expectations- Read, view, and interpret a variety of media effectively; Demonstrate cultural literacy; Promote civic responsibility regarding issues facing our community and the world today; Practice personal wellness and social responsibility.*

### **844 MUSIC TECHNOLOGY I**

**½ credit**

Music Technology I is a one semester course offered by the music department to students in grades 9-12 at Dracut Senior High School. The program is designed to broaden the arts education opportunities of students, to offer musical experiences beyond those of the traditional performing ensembles, and to provide students with real-world applications of technologies currently in use in the music industry. Instruction will be a combination of lecture, hands-on exploration and creating, guided individual and group projects, and supplemental reading assignments. The course will explore sound production, recording and transmission, electronic music composition and arranging, live audio reinforcement, multi-track studio recording, editing, mixing and mastering. There will also be an examination of current legal and ethical issues regarding digital music and the recording industry. *21<sup>st</sup> Century Learner Expectations- Read, view, and interpret a variety of media effectively; Demonstrate cultural literacy; Promote civic responsibility regarding issues facing our community and the world today; Practice personal wellness and social responsibility; Utilize an array of methods to research, analyze, problem solve; Use technology effectively and responsibly.*

**846 MUSIC APPRECIATION****½ credit**

Music Appreciation, a semester course, seeks to inform the student about the indigenous beginnings of North American music, to explain 20<sup>th</sup> Century music in terms of the origins of the popular styles of blues, jazz, folk, rock, and pop, and briefly survey the Western “Classical” tradition from the middle ages to the 20<sup>th</sup> century. By the end of the course, the student should have the background for appreciating the major genres of music with which they are most likely to come into contact in the United States, as well as having a deeper ability to appreciate the various primary elements of any musical creation and/or performance. *This course is open to all students. 21<sup>st</sup> Century Learner Expectations- Read, view, and interpret a variety of media effectively; Demonstrate cultural literacy; Promote civic responsibility regarding issues facing our community and the world today; Practice personal wellness and social responsibility.*

**847 INTRODUCTION TO THEATER****½ credit**

Introduction to Theater is a semester course providing students with the opportunity to learn what it takes to bring together a theatrical production. Students will engage in acting and improvisation, script and play writing, blocking and staging, lights and sound, backstage carpentry and front of house presences. *21<sup>st</sup> Century Learner Expectations- Read, view, and interpret a variety of media effectively; Demonstrate cultural literacy; Promote civic responsibility regarding issues facing our community and the world today; Practice personal wellness and social responsibility.*

<b>ART</b>
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**MISSION STATEMENT**

The ultimate art education goal at Dracut High School is to heighten public awareness of and appreciation for all forms of visual art and the visual world as a whole. We hope that our efforts and encouragement not only introduce students and the community to the art world, but also foster an understanding of how our lives are enriched by the diversity of cultures that are the historic source of the fine arts. Through our teaching and our own practice, we help students acquire higher-level creative skills and analytical powers, which in turn deepen the sense of satisfaction and fulfillment they derive from encounters with art. We believe that graduates of Dracut High School who begin their careers with more finely tuned artistic sensibilities will make greater contributions to the community and entire Commonwealth and also serve as well-rounded role models for the next generation of students.

**820 CERAMICS****½ credit**

Using the medium of clay, students will be introduced to this popular three-dimensional art form. Students will learn the fundamentals of hand-building pottery using pinch, coil, and slab techniques. Additionally, students will learn glazing and kiln-firing techniques. Students will combine function and form to create works of art that can be used or displayed in their homes. Advanced study allows students to expand their skills in sculpturing with the use of wire, wood, glass, cardboard, and metal in the creation of three dimensional art. *21<sup>st</sup> Century Learner Expectations- Demonstrate cultural literacy.*

**871 INTRODUCTION TO STUDIO ART****½ credit**

This course is an introduction to Fine Arts practice in the areas of drawing, design, and color. Students will become familiarized with art in practice and in theory. Art appreciation and aesthetics will be incorporated into the curriculum. *Open to all grade levels. 21<sup>st</sup> Century Learner Expectations- Read, view, and interpret a variety of media effectively; Demonstrate cultural literacy; Promote civic responsibility regarding issues facing our community and the world today; Practice personal wellness and social responsibility.*

**874 STUDIO ART****½ credit**

This course will explore the elements and principles of art and design through drawing, painting, design, and craft. Art appreciation and aesthetics will be incorporated into the curriculum.

*Prerequisite – Successful completion of Introduction to Studio Art. 21<sup>st</sup> Century Learner Expectations- Read, view, and interpret a variety of media effectively; Demonstrate cultural literacy; Promote civic responsibility regarding issues facing our community and the world today; Practice personal wellness and social responsibility.*

**895 ADVANCED ART I****1 credit**

This course is an in-depth study of drawing and painting. Students will explore various drawing and painting media, and through a series of class projects, will gain technical proficiency. Art appreciation and aesthetics will be incorporated into the curriculum.

*Prerequisite – Successful completions of Intermediate Studio Art. 21<sup>st</sup> Century Learner Expectations- Read, view, and interpret a variety of media effectively; Demonstrate cultural literacy; Promote civic responsibility regarding issues facing our community and the world today; Practice personal wellness and social responsibility.*

**897 INDEPENDENT ART STUDY****1 credit**

This class gives the highly motivated student the opportunity to develop his or her talents further while pursuing a specific study area in greater depth. *By permission of the instructor. 21<sup>st</sup> Century Learner Expectations- Read, view, and interpret a variety of media effectively; Demonstrate cultural literacy; Promote civic responsibility regarding issues facing our community and the world today; Practice personal wellness and social responsibility.*

# WELLNESS PROGRAM

## MISSION STATEMENT

The Wellness Program promotes optimum health through specific and timely education of all students in Dracut High School. By offering a variety of both health and physical education classes, students are provided with information about the importance of balancing a physical, mental, emotional, and social lifestyle. The program fosters critical thinking in students with the expectation that the students will continue to make appropriate choices that lead to healthy lifestyles. All students must pass 1 credit of Wellness

### Student Expectations

*The Dracut High School student:*

- Uses the skills of speaking and writing to provide and obtain information, express to meet minimum graduation requirements
- Understands the concepts of personal physical fitness and good health
- Demonstrates community by showing respect for individual differences and lifestyles
- Takes responsibility for his/her learning
- Demonstrates responsible personal and social behaviors
- Will develop decision-making skills that will assist them in making healthy choices
- Works cooperatively with other students
- Is expected to change into proper attire for the physical education portion of class
- Proper attire includes sneakers, shorts or wind-pants, t-shirt, or sweats

### Notes to assist in selecting courses:

- Wellness I and Wellness II are required courses
- Passing Wellness I and Wellness II are prerequisites for taking Junior and Senior electives
- Wellness I will consist of physical activity and Wellness II will consist of classroom instruction

COURSE #	TITLE	GRADES	CREDITS
<b>900</b>	Wellness I - <b>Required</b>	9	½
<b>910</b>	Wellness II - <b>Required</b>	10	½
	<b>Electives for Juniors and Seniors</b>		
<b>941</b>	Outdoor Activities/Indoor Activities	11 - 12	½
<b>942</b>	Strength and Conditioning	11 - 12	½
<b>943</b>	Lifetime Activities	11 - 12	½
<b>960</b>	Wellness Internship - Seniors only	12	½

## REQUIRED WELLNESS COURSES

**900 WELLNESS I** **½ credit**

The fitness module will afford students the opportunity to assess their present level of fitness by participating in the physical fitness program. The module will also introduce students to the weight room, cooperative games and team sports. The knowledge gained in this module will enhance the

students' fitness opportunities throughout their high school years. *This course is a freshman requirement. 21<sup>st</sup> Century Learner Expectations: Practice personal wellness and social responsibility.*

### **910 WELLNESS II**

**½ credit**

In this module students will be in a classroom setting and cover topics such as drugs and alcohol, teenage depression, suicide, human sexuality, relationships, sexual harassment, sexually transmitted diseases and prevention, and decision-making. *This course is a sophomore requirement.*

*Prerequisite: Wellness I. 21<sup>st</sup> Century Learner Expectations: Practice personal wellness and social responsibility.*

## **WELLNESS ELECTIVES FOR SOPHOMORES, JUNIORS AND SENIORS**

### **941 OUTDOOR ACTIVITIES/INDOOR ACTIVITIES**

**½ credit**

Outdoor Activities will emphasize the aspect of participation in games as well as instruction. Indoor Activities will emphasize league type participation. A large part of the course will also be on instruction of techniques, rules, care of equipment, and safety. Outdoor Activities may include softball, lacrosse, flag football, golf, soccer, walking/running, ultimate frisbee, and disc golf. Indoor Activities may include floor hockey, racquet sports, basketball, volleyball, aerobics, weight training, and walking/running. *Prerequisite: Wellness I and Wellness II. 21<sup>st</sup> Century Learner Expectations: Practice personal wellness and social responsibility.*

### **942 STRENGTH AND CONDITIONING**

**½ credit**

**Strength and Conditioning will introduce or reinforce proper use of weight and strength equipment and cardiovascular fitness. This course is recommended for all interscholastic athletes.** *Prerequisite: Wellness I and Wellness II. 21<sup>st</sup> Century Learner Expectations: Practice personal wellness and social responsibility.*

### **943 LIFETIME ACTIVITIES**

**½ credit**

This elective will include activities that will encourage participation well after high school to help maintain an active lifestyle. Activities will include lifetime sports and games such as bocci, golf, ping-pong, ultimate frisbee, jogging, and horseshoes. All activities will be held on school grounds.

*Prerequisite: Wellness I and Wellness II. 21<sup>st</sup> Century Learner Expectations: Practice personal wellness and social responsibility; Promote civic responsibility regarding issues facing our community and the world today.*

### **960 WELLNESS INTERNSHIP**

**½ credit**

This module is offered to seniors who are interested in pursuing a career in health or fitness. The students will be able to utilize their health-related attributes in assisting one of the wellness teachers.

*Prerequisite – Wellness I and Wellness II. Permission from instructor and senior class status. 21<sup>st</sup> Century Learner Expectations: Practice personal wellness and social responsibility; Promote civic responsibility regarding issues facing our community and the world today.*

## ALTERNATIVE STUDIES

Alternative Studies are programs or courses that are not attached to a particular academic department. Courses numbered in the 800s via preference to seniors and juniors.

### **201 ENGLISH AS A SECOND LANGUAGE (ESL) ½ credit**

This course is appropriate for English language learners at varied levels of English proficiency. Students will receive lessons which will enhance listening, speaking, reading, and writing proficiency in the English language. Students will also receive interpretative assistance to help them achieve success in other courses. *Up to three credits may be earned. 21<sup>st</sup> Century Learner Expectation: speak effectively; write effectively.*

### **202 ENGLISH AS A SECOND LANGUAGE (ESL) /NEWCOMER II ½ credit**

This course is appropriate for English language learners who are at the early intermediate levels of English proficiency. Students will receive lessons to enhance listening, speaking, reading, and writing. An additional emphasis is placed on academic vocabulary development. *Up to two credits may be earned. 21<sup>st</sup> Century Learner Expectation: speak effectively; write effectively.*

### **203 ENGLISH AS A SECOND LANGUAGE (ESL)/NEWCOMER I ½ credit**

This course is appropriate for English language learners who have little to no English proficiency. Students will receive lessons at the beginning stages of language acquisition to enhance listening, speaking, reading, and writing. An additional emphasis is placed on basic vocabulary development. *Up to one credit may be earned. 21<sup>st</sup> Century Learner Expectation: speak effectively; write effectively.*

### **700 INDIVIDUALIZED INSTRUCTION 1 credit**

This full year course is offered to special education students who have specific instructional needs documented in their Individualized Education Programs (IEP). The content of the course is based on the specific needs of the student as listed in their IEP. *21<sup>st</sup> Century Learner Expectation: speak effectively; write effectively.*

### **802 STUDY AND ORGANIZATIONAL SKILLS 1 credit**

This course will cover topics to support students for a smoother transition at DHS. Some of the topics include: diverse learning styles, setting goals, listening in class, taking notes in class, reading and taking notes from textbooks, building vocabulary, utilizing a student agenda book, strategies for test taking, reference sources, and planning for post-high school and college.

*Students will be assigned to this course upon recommendation of Dracut High School guidance counselors, department directors, or administrators. 21<sup>st</sup> Century Learner Expectations: speak effectively; write effectively.*

### **803-804 INTERNSHIP: SCHOOL-TO-WORK CAREER EXPLORATION 1 credit, ½ credit**

Students will work or intern at a local business, under the supervision of a staff member. Students will be required to attend seminars, meet with a high school staff member, submit written logs or research papers, and maintain good working habits in order to earn credit. A working agreement between the local business and the high school will be in place before the internship begins. Students may need to seek and/or suggest potential work sites. *21<sup>st</sup> Century Learner Expectations: speak effectively; write effectively; promote civic responsibility regarding issues facing our community and the world; practice personal wellness and social responsibility.*



## **808-809 COMMUNITY SERVICE**

**1 credit, ½ credit**

Students will voluntarily provide services to various community programs. Students will be assigned a supervisor (at the work site or a DHS staff member) who will oversee, report student achievements, and submit evaluations. The student will be required to keep a daily log of service(s) provided. Possible sites include: Dracut Historical Society, Elementary Schools, Town or School Business Offices, Elderly Services. A working agreement between the community agency and the High School will need to be agreed upon. Students may need to seek and/or suggest potential service sites. *21<sup>st</sup> Century Learner Expectations: promote civic responsibility regarding issues facing our community and the world; practice personal wellness and social responsibility.*

## **810-814 HIGHER LEARNING/DUAL ENROLLMENT**

**1 credit, ½ credit**

Students may enroll in courses at nearby universities, colleges, and institutions of vocational or higher learning to earn college credit or a skill. The student will be required to pay the necessary course fees directly to the outside institution and submit progress reports and final grades to the high school counselor. *21<sup>st</sup> Century Learner Expectations: Speak effectively; write effectively; promote civic responsibility regarding issues facing our community and the world*

## **INTERSCHOLASTIC ATHLETICS**

Dracut High School is a member of the Massachusetts Interscholastic Athletic Association. Dracut also has a long affiliation with the Merrimack Valley Conference League. Interscholastic sports activities are open to all students who meet academic eligibility requirements. Students should avail themselves of the opportunity to explore a sport activity while in high school. Dracut High School offers a wide variety of team and individual sports. Some of these include:

Fall: Girls' Volleyball, Field Hockey, Boys' & Girls' Soccer, Football, Girls' Swimming, Golf, Boys' & Girls' Cross-Country, Cheerleading

Winter: Gymnastics, Boys' & Girls' Basketball, Ice Hockey, Wrestling, Indoor Track, Cheerleading

Spring: Baseball, Softball, Boys' Volleyball, Track & Field, Boys' and Girls' Lacrosse

## **CO-CURRICULAR ACTIVITIES**

There are many co-curricular activities at Dracut High School, and these are open to all eligible students for participation. A student will enrich his or her academic life and social education by participating in one or more of these activities. All students are encouraged to join the various organizations or activities that will meet their interests. Memberships in a particular club, specific team, or within a performing group are ways students may participate. The support from attendance, school spirit, and from positive audience response is a way in which students gain more from the education offered by Dracut High School. The following co-curricular activities are sponsored by Dracut High School:

Class Activities	Marching Band	Chorus	Environmental Club	Art Club
A Capella Chorus	Student Council	Newspaper	Flag Team	National Honor Society
Peer Mentors	Literary Magazine	Spring Musical	Cheerleading	Navigator - School Newspaper
Show Choir	Theater	Yearbook	Debate Club	Spanish Honor Society
Band	Melting Pot Club	Service Learning	GSA	Tri-M Music Honor Society
		National Business Honor Society		