Hudson High School Hudson, Massachusetts

# Program of Studies



2024-2025

Hudson High School 69 Brigham Street Hudson, MA 01749



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# STATEMENT of NON-DISCRIMINATION

Chapter 622/Title IX Equity Statement: Hudson High School is in compliance with the Chapter 622 of the Acts of 1971 and Title IX of the Educational Amendments of 1972. Chapter 622 guarantees that all aspects of public school education must be fully open and available to members of both sexes, minority groups and handicapped. No student may be excluded from any course, activity, service or resource available in that school because of the race, color, sex, sexual orientation, religion, national origin, or handicap of that student. Title IX of the Educational Amendments of 1972 insures that no person shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subject to discrimination in any federally-assisted program. For information, please contact the Title IX/Chapter 622 Coordinator at 978-567-6100.

Chapter 622/Title IX Grievance Procedure: Any student or employee of the Hudson Public Schools who believes he/she has been discriminated against, denied a benefit, or excluded from participation in any educational program or activity on the basis of sex, sexual orientation, race, religion, color, national origin, or handicap, may file a complaint with the Chapter 622/Title IX Coordinator. This may be done through the Superintendent's Office, 155 Apsley Street, Hudson, MA 01749.

# Hudson High School Core Values and Beliefs about Learning

(March 2016)

Hudson High School educates students for active citizenship in a global environment. We aim to cultivate each student's passion for learning and ability to think critically and independently.

# Hudson **PRIDE** is:

Perseverance

We work hard to achieve our goals and overcome challenges

Responsibility

We take ownership of our learning and value service to our community and our world

Integrity

We act with honesty and hold ourselves accountable

Diversity

We treat all with dignity and work to build a strong school community

Excellence

We hold ourselves to high academic and social expectations



#### **Demographic Profile**

Hudson is located in Central Massachusetts, seventeen miles east of Worcester and twenty-eight miles west of Boston. Hudson is a residential town with a population of 19,000 with a significant amount of industry and businesses in the community. The public school system consists of one pre-school program, three elementary schools (grades K-4), one middle school (grades 5-7) and one high school (grades 8-12). The High School is accredited by the New England Association of Schools and Colleges.

#### **Course Commitment - Schedule Change Procedures**

Allocation of staff, rooms and the number of sections offered of each course are determined by the number of student requests received for a specific course. Additionally, course changes present a significant disruption to teaching and learning. That said, students are committed to remain in the courses they request for the entire year, or in the case of semester-based courses, for the entire semester. We do, however, understand that on occasion extenuating circumstances exist that require a course change request to be considered. From time to time, student course requests cannot be filled. When this occurs, student schedules are often completed without consultation with the specific student.

Schedule adjustments will only be considered when certain conditions apply (see below). When these conditions are met, change requests can be addressed during the summer schedule adjustment period in the counseling office. Students wishing to discuss schedule issues that meet one or more of the conditions below must submit a schedule change request to their school counselor. Walk-in appointments will not be accepted during the summer adjustment period. If a student is unavailable to address a schedule request during the summer, school counselors will be available at the start of school during the school day in the counseling office. Students with schedule concerns will attend all scheduled classes until the September schedule adjustment period begins. Dates for the September schedule adjustment period will be publicized in the summer. It is important for students and parents to understand that the number of seats in each class is limited. That said, the school cannot guarantee that all change requests that meet the conditions below can be resolved.

#### Conditions required for schedule change requests (core academic classes) to be considered:

- Students who requested a specific core academic course and are not enrolled in that course
- Students who have been assigned to a different course level than the one they requested
- Students who have not met the prerequisite for a course
- Students who completed and passed a summer school course that replaces a course failed in the previous school year

Change requests <u>will not</u> be allowed for any reasons other than those listed above. This includes requests to change elective courses or any course based on teacher assignments, lunch schedules, or to be in classes with friends.

#### Schedule Changes Beyond the Schedule Adjustment Period

Course change requests initiated beyond the adjustment period will only be considered under extenuating circumstances and must be authorized by your child's school counselor, teacher, the appropriate department director and the assistant principal assigned to your child's grade. A "Request for Schedule Change" form must be obtained in the counseling office to begin the process. No schedule changes will be approved that reduces a student's course load below 28 credits except in extenuating circumstances with the approval of the principal. Discretionary changes to course levels will not be considered until mid-September. An example of a discretionary change would be dropping AP English Literature and adding Honors English 12. It is important that students spend time in a course before they request a level change so that they and the teacher have the opportunity to gauge the appropriateness of the placement.

Students who are approved to withdraw from a full year or semester one course after October 1<sup>st</sup> or after March 1<sup>st</sup> for a semester two course will receive a final letter grade of "WP" (withdrew passing) or "WF" (withdrew failing). This applies to course level changes as well as changing courses all together. These grades become a part of the student's permanent academic transcript and will not be removed from the transcript under any circumstances.

#### **AP Course Requests & Schedule Changes**

AP course offerings are determined by the number of student requests. Given this, students who request an AP course during the course selection period in January are making a commitment to the course. Students are not permitted to change their AP course request after course selection; they must initially attend the class if it is scheduled. Requests to drop an AP level course will not be considered until mid-September when all discretionary changes to course levels will be considered.

# **HEALTH and SEXUALITY EDUCATION**

All students are required to take one semester of Wellness each year at Hudson High School. These courses include units on human sexuality and human sexual education. Parents/guardians may exempt their child from any portion of a curriculum that involves human sexual education or human sexuality issues, without penalty to the student, by sending a letter to the school principal requesting an exemption. Any student exempted under this policy may be given an alternative assignment. A copy of the Parental Notification Relative to Sex Education policy of the Hudson School Committee (Policy IHAMB) can be obtained from the Superintendent's Office by calling 978-567-6100 or found online at <a href="https://www.hudson.k12.ma.us">www.hudson.k12.ma.us</a>. Our program provides information and data to provide knowledge for students in the 21st century. We encourage students and families to communicate together to share their personal morals and ethical family values.

The following curriculum suggestions cover the spectrum of what will be taught in wellness courses.

- 1. Abstinence: The advantage and pressures of adolescence
- Physiology
  - a. Secondary Sex Characteristics
  - b. Male and Female Reproductive Systems
  - c. Menstrual Cycle
  - d. Masturbation
  - e. Human Sexual Response
  - f. Fertilization and Conception
  - g. Prenatal Development and Birth
  - h. Reproductive System Diseases and Disorders
- 3. Pregnancy Prevention: Methods of Family Planning and the role of Abstinence
  - a. Condoms and other barrier methods
  - b. Hormonal methods, Intrauterine Devices, and emergency contraception
  - c. Natural methods
  - d. Sterilization
  - e. When Contraception Fails
    - i. Women choose: 1.To give birth; 2. Adoption (closed/open); 3. Abortion
- Sexual Risks
  - a. HIV/AIDS
  - b. Sexually Transmitted Infections/Diseases
  - c. Teen Pregnancy
    - i. Health Risks, Education Challenges, and Financial Issues
    - ii. Decision-Making and Teen Parenting Options
  - d. Unwanted Sexual Activity
- 5. Family
  - a Nurturing a Family Unit
  - b. Importance of Family
  - c. Understanding the Changing Family
  - d. Challenges that May Arise
  - e. Balancing Work, School and Family
  - f. Managing Resources
  - g. Caring for the Family
- 6. Understanding Sexuality
  - a. Puberty
  - b. Human Sexual Response Cycle
  - Impacts of Sexual Relationships
    - i. Choosing Abstinence
    - ii. Dealing with Sexual Pressure
  - d. Biological sex- sex chromosomes and intersex (babies born with ambiguous biological sex) and biological differences
  - e. Gender
- i. Gender Identity
- ii. Gender Expression
- iii. Sexual Attraction

# **COURSE SELECTION PROCESS**



Selecting courses for each school year is an important process in planning for a successful high school career that involves four key components. Careful consideration of each component results in an intentional course plan allowing students to develop both academically and personally.

- Component 1: Program of Study Review
  - Students and guardians should familiarize themselves with all courses offered at HHS by reading through the course
    descriptions of each class listed in the Program of Studies. Designating time to complete this task informs families of
    all available options.
- Component 2: Teacher Recommendations
  - Teachers will input core course recommendations based upon the combination of their content expertise of future classes and knowledge of student strengths and desires. Families are strongly encouraged to follow teacher recommendations and reach out to teachers with specific course questions.
- Component 3: Counselor Conversations
  - Counselors are available to meet with students during the course selection period to provide tailored guidance on developing a balanced course plan that both challenges and excites students for the following year.
- Component 4: Discussions with Family and Friends
  - Students should engage in family conversations to consider their life outside of school and future plans and how those obligations and goals may impact their decisions in selecting courses. Students are also encouraged to consult with their peers about their experience with courses. It's important to remember that each student may have unique experiences and may not share the same perspective of a particular course.

#### A few helpful reminders:

- Students must enroll in 28 credits worth of courses (an exception being made to seniors eligible for X block)
- Remaining graduation requirements should be considered each year.
- Some courses have prerequisites that must be met in order to request that specific course (e.g. Forensics has a prerequisite of Biology, Chemistry, and Geometry).
- College selectivity and academic admission requirements vary greatly. It is recommended that students and guardians inform themselves of the academic requirements for schools of interest and consult with the student's school counselor regarding their plans. Honors, Advanced Placement, and Dual Credit courses provide the most rigorous training for college.
- Students may use an academic planner to help develop their high school course trajectory. Revisiting this plan each year assists in the decision making process.
- Students and guardians may be required to complete an override form if they disagree with core teacher recommendations.

#### AN IMPORTANT MESSAGE TO PARENTS AND STUDENTS



The material contained in this Program of Studies is our best estimate of what will be offered during the 2024-2025 school year at Hudson High School. It may be necessary to make adjustments to course offerings based on course selection numbers, staffing levels, and/or the approved FY25 school budget.

# POST-SECONDARY PATHWAYS PROGRAMS

Hudson High School offers four unique programs that provide students the opportunity to gain the knowledge and skills required to pursue specific college and/or career opportunities. The sequence of courses offered in each pathway are designed to deepen students' understanding of a specialized topic. Pathway program courses are open to all students. Students are not required to enroll in a post-secondary pathway, nor are they required to complete a pathway after completing one or more of the courses connected to a pathway program. Students may enter or exit a pathway at any point, but students must be aware of how much time is required to complete a pathway program's requirements.

We provide an overview of each pathway program below, and the course descriptions associated with each pathway program course can be found within each department's course listings.

#### **Biomedical Pathway:** (Pathway contact: Sarah Davis, PK-12 Director of Science)

In the Biomedical pathway, students solve medical mysteries, design innovative medical solutions, develop in demand lab skills, and grow as inspired thinkers and problem-solvers. The Biomedical pathway is part of Project Lead the Way, a nation-wide program designed to give students access to real-world applied learning and career experiences. Students with qualifying scores on end-of-course assessments are eligible to earn college credit for any Project Lead the Way course.

9 <sup>th</sup> /10 <sup>th</sup> Grade	10 <sup>th</sup> -12 <sup>th</sup> Grade	11 <sup>th</sup> /12 <sup>th</sup> Grade
Principles of Bio-medical Science	Human Body Systems	Medical Intervention
		Honors PLTW Common Capstone

While not a requirement of the pathway, students may also benefit from enrolling in the following courses:

- AP Biology or AP Chemistry
- Forensic Science
- Anatomy & Physiology

#### Education & Care Pathway: (Pathway contact: Jeannie Graffeo, Early Childhood and Wellness Subject Matter Leader)

The Education and Care Pathway is designed to support student exploration and opportunity for certification in the Early Education and Care field. In Early Childhood, students will develop content-specific skills in infant, toddler, preschool, elementary, and young adolescent education and care. Students will plan educational experiences, programs and environments while guiding children intellectually, socially, emotionally, and physically. The Early Childhood Pathway will provide students with an internship experience to obtain the 150 hourly requirement for the Massachusetts Department of Early Education and Care lead teacher certification. Through the internship experience, all students will gain transferable, practical skills to apply to post-secondary education and/or the workforce. Transportation to and from the internship site must be provided by the student/family. Students who complete the sequence of courses below and graduate from Hudson High School meet the Massachusetts Department of Early Education and Care requirements to become eligible to apply for the Massachusetts Department of Early Education and Care Lead Teacher Certification. Due to Hudson High School's articulation agreement between our Early Education program and Quinsigamond Community College (QCC), students meeting the QCC requirements may also be eligible to obtain 3 graduate credits from Quinsigamond Community College.

10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Child Growth and Development	Early Childhood Education I	Early Childhood Education II

While not a requirement of the pathway, students may also benefit from enrolling in the following courses:

- Conflict Resolution
- AP Psychology

#### **Engineering Pathway**: (Pathway contact: Ellen Schuck Director of Technology)

The Engineering Pathway will provide students with a foundation for pursuing many different engineering careers, including Mechanical Engineering, Electrical Engineering, CAD Designer, Product Development, and many more. Students can take courses as part of the

Project Lead the Way sequence or there are also courses in robotics, computer aided-design (CAD) and 3D printing. The engineering pathways is part of Project Lead the Way, a nation-wide program designed to give students access to real-world, applied learning and career experiences. Students with qualifying scores on end-of-course assessments are eligible to earn college credit for any Project Lead the Way course. Additionally, Project Lead the Way has partnered with the College Board in an effort to recognize students who take a combination of Advanced Placement math and science courses and Project Lead the Way engineering courses.

9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Introduction to	Principles of Engineering	Digital Electronics (offered odd	Honors PLTW
Engineering Design		years only)	Common Capstone
		<b>Honors PLTW Common Capstone</b>	

While not a requirement of the pathway, students may also benefit from enrolling in the following courses:

- Exploring Flight & Space and the Environment
- Robotic Design
- 3D Modeling and Design

#### Portuguese Medical Interpretation Pathway: (Pathway contact: Ana Pimentel, Director of World Language)

The Bureau of Labor Statistics indicates that the future employment of interpreters and translators projects to grow much faster than the average rate for all occupations. The Portuguese Interpreter/Translator Pathway is designed to continue developing skills in Portuguese language, as well as developing skills and techniques in Interpretation and Translation. Students become eligible to enroll in Honors Medical Interpretation through the recommendation of their classroom teacher. Generally, students become eligible by scoring at the "Intermediate-High" proficiency level in both Portuguese and English on the standards designated by the American Council on Teaching Foreign Languages (ACTFL). Students who complete the two Medical Interpretation courses, earn an 85% or higher in Honors Medical Interpretation 2, and pass the final exam become eligible to earn a Program Certificate that fulfils the training requisites to work as a Medical Interpreter.

11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Honors Medical Interpretation I	Honors Medical Interpretation II

While not a requirement of the pathway, students may also benefit from enrolling in the following course:

- Principles of Biomedical Science
- Human Body Systems

#### Civic Engagement Pathway: (Pathway contact: Todd Wallingford, K-12 Curriculum Director for English and Social Studies)

In higher education, the workplace, and public life, those with strong leadership skills and a sense of self-efficacy are most equipped to work for the common good and to make our society a more just place. The Civic Engagement Pathway is open to all students who wish to develop the skills, knowledge, and dispositions for effective civic engagement, in high school and beyond. Pathway students must earn a 2.0 in three pathway courses, complete a Civic Action Project, and participate in extra-curriculars that together help students develop their Civic Engagement Competencies. They meet quarterly with a CEP advisor to reflect on competency development and opportunities for civic engagement. In a presentation to faculty, administrators and peers during their senior year, a student charts the arc of their civic experiences, substantiating how they have developed proficiency in the Competencies. Successful completion of the pathway earns a student a CEP seal on their diploma. This pathway will be open first to members of the Class of 2026.

#### Pathway Course Options:

AP Seminar Sociology Contemporary World Issues
AP Us Government & Politics Journalism Psychology (AP, Academic)
Contemporary Legal Issues Public Speaking A Call to Action
Conflict Resolution Economics Anthropology

# **GRADUATION REQUIREMENTS**

(Approved by the Hudson School Committee - February 9, 2021)

In order to graduate, all students must earn a minimum number of 96 credits. Students must earn passing grades in the courses listed below as well as pass ELA, Math and Science MCAS tests:

English	16 Credits	
Mathematics	16 Credits	
Science	12 Credits	Must be lab-based science classes
Social Studies	12 Credits	
World Language	8 Credits	Must be 2 courses of the same language
Wellness	8 Credits	One semester each year
Fine, Performing, or Applied Arts	2 Credits	One semester of music, drama, visual arts, technology, business, or family & consumer science

All of the credits above are earned in grades 9-12. No credits are earned in Grade 8 – this includes world language. Students must accumulate the following number of minimum credits each year in order to remain with their graduating class:

For a freshman to become a sophomore	18 Credits
For a sophomore to become a junior	46 Credits
For a junior to become a senior	68 Credits

Seniors must be passing 24 credits on the April report card in order to be eligible to attend senior activities.

Hudson High School's graduation requirements seek to provide all students with the opportunity to complete MassCore's recommendation for course completion.

**MassCore**: Adopted by the Board of Elementary and Secondary Education in 2007 and amended in 2018, MassCore is a state-recommended program of study intended to align high school coursework with college and workforce expectations.

The program of studies includes the successful completion of four units of English, four units of mathematics, three units of a lab-based science, three units of history, two units of the same foreign language, one unit of the arts, and five additional "core" courses. A computer science course that includes rigorous mathematical or scientific concepts and aligns with the 2016 Digital Literacy and Computer Science Framework can substitute for either a mathematics course or a laboratory science course.

#### Civic Action Project - A Graduation Requirement

In keeping with state legislation passed in 2018 (An Act to Promote and Enhance Civic Engagement) beginning with the Class of 2024, all students are required to be enrolled in at least one course that provides a Civic Action Project in order to graduate. Civic Action Projects ask students to apply civic knowledge, skills, and dispositions to engage in the process of creating social and political change in their communities. Student-led and non-partisan in nature, these projects are built into course curricula across several courses at Hudson High School, giving students the opportunity to fulfill this requirement at any point in their four years. Classes that contain a Civic Action Project are listed here and also designated as such in this Program of Studies.

AP Seminar
AP Government and Politics
Art III
A Call to Action

Child Growth and Development Conflict Resolution Economics Human Body Systems PLTW PLTW Common Capstone Psychology Sociology US and World History Survey

# **ENGLISH LANGUAGE ARTS**

Mr. Todd Wallingford, Director of Humanities, 978-567-6100 ext. 41151

Email: twallingford@hudson.k12.ma.us

The English Language Arts Department offers courses that aim to prepare students for college and career while challenging them to think deeply about issues that shape their lives. Through instruction that is aligned to the Massachusetts Curriculum Frameworks for English Language Arts and Literacy, students read diverse texts, write for multiple purposes and audiences, and practice their speaking and listening skills.

Students are required to enroll in one core English Language Arts class every year and may take additional electives. Writing well is a skill accomplished through active practice. It is a complex, recursive thinking process that requires the writer to move through several stages. All classes require extensive writing, formal and informal, that serves many purposes. Reading, too, is a complex skill that reaches far beyond mere decoding of words. Reading is taught as explicit processes, ones that all students can practice and improve. Students are taught how to be critical readers and consumers of multiple types of text. Through class discussions, students learn to construct meaning from text. They understand that interpretation and analysis require the application of evidence to support a position or thesis. Through critical and analytical reading, students deepen their ability to understand and discuss literature.

Throughout the year, the ideas explored through these texts often compliment those studied in social studies, providing students with a cross-curricular humanities experience. For instance, in grade 8, topics of personal, cultural, and institutional identity are explored throughout literature in English and through the study citizenship in Civics. Additionally, this humanities experience extends to instruction in five core skill areas that serve students well beyond their classroom walls. Through routine reflection on skill development, each student tracks growth and sets goals to become: an effective communicator, a critical thinker, an effective collaborator, a creative and innovative thinker, and an independent learner.

Students are required to enroll in one core English Language Arts class every year and may take additional electives. Juniors and seniors, who take courses together, can choose an Advance Placement course or one built around a theme that drives the curricula and text selection. The Program of Studies lists four of these thematic courses, three of which are offered each year.

	Core Course Offerings	Elective Course Offerings and Pathways
Grade	Essentials of English 8	Writing Electives:
8	English 8	Creative Writing 8 - Academic Elective Creative Writing I - Academic Elective
	Essentials of English 9/10 - Academic	Creative Writing II - Academic Elective
Grade 9	English 9 - Academic	
	English 9 - Honors	Journalism Electives:
	Essentials of English 9/10 - Academic	Big Red Journalism I - Academic Elective Advanced Big Red Journalism - Honors Elective
Grade 10	English 10 - Academic	
	English 10 - Honors	
Grades 11/12	Essentials of English 11/12 - Academic	Skill-Building Elective:
	Coming of Age Literature - Academic	Academic Literacy 8 - Academic Elective

	Coming of Age Literature - Honors	
	Dystopian Literature - Academic	
	Dystopian Literature - Honors	
Grades	Storytellers – Academic/Honors (offered alternate years; next offered 2025-2026)	
11,12	Linguistics and Media Studies - Honors	, 12
	Advanced Placement Language and Composition	
	Advanced Placement Literature and Composition	

#### **CORE ENGLISH COURSES**

#### Essentials of English 8 194

#### Grade 8

While this course shares learning outcomes and themes of study with English 8 (184), it is designed with the structures and supports necessary to meet the specific needs of students who struggle significantly with reading and writing. Students explore themes of identity through multiple genres of text in order to become more effective in both written and spoken language. Through many types of writing, students begin to learn how to support a clear thesis with well-developed ideas. Students recognize language conventions as they read and learn to incorporate correct grammar and usage into their own writing. Students contribute to class discussions in order to develop stronger oral communication skills and build active listening skills through a variety of methods.

#### English 8 184

#### Grade 8

In eighth grade English, students focus on sharpening their skills in reading, writing, grammar and vocabulary, as well as speaking and listening. While students read a vast selection of texts, most of these explore issues surrounding the creation of identity - the forces that shape and alter individual and institutional identities. Among these text are: The Giver by Lois Lowry, Copper Sun by Sharon Draper, A Raisin in the Sun by Lorraine Hansberry, A Christmas Carol by Charles Dickens, short stories from Edgar Allan Poe, as well as a variety of other short stories and poems. Students analyze author's craft and the ways writers develop their art in the English language. Students draft, revise, and edit their writing, as well as work on their speaking and listening skills. In collaborative environment, students strive to become confident and independent learners who think critically, creatively and communicate effectively across the curriculum and in their own lives.

#### Essentials of English 9/10 195 - 4 Credits

Academic - Grades 9-10

While this course shares learning outcomes and themes with the 9th and 10th grade English Language Arts courses, it is designed with the structures and supports necessary to meet the specific needs of freshmen and sophomores who struggle significantly with their literacy skills. Particular emphasis is placed on the development of student's reading comprehension, language skills (including vocabulary knowledge and development) and critical thinking skills. By exploring various themes through multiple genres of text (fiction, literary non-fiction, poetry, and film) students refine their writing skills and complete analytical, persuasive, and expository essays, along with personal and creative writing and a research project.

English 9 149 - 4 Credits

Academic - Grade 9

In this course, students study literature, writing, and vocabulary. Major texts include: Lord of the Flies by William Golding, Romeo and Juliet by William Shakespeare, Animal Farm by George Orwell, as well as many other short stories, essays, and poems. Students strengthen their close, critical reading skills through assessments that include: annotated texts, close readings, class discussions, exams, and analytical

and personal essays. The course emphasizes deep understanding and inquiry of texts that often explore issues of justice, morality, and identity.

English 9 150 - 4 Credits

Honors - Grade 9

In this course, students study literature, writing, and vocabulary. Major texts include: Lord of the Flies by William Golding, Romeo and Juliet by William Shakespeare, Animal Farm by George Orwell, as well as many other short stories, essays, and poems. Students strengthen their close, critical reading skills through assessments that include: annotated texts, close readings, class discussions, exams, and analytical and personal essays. The course emphasizes deep understanding and inquiry of texts that often explore issues of justice, morality, and identity. Students who take the course for honors credit are subject to more rigorous grading standards on major assignments, complete reading and writing assignments that supplement the core academic texts, and are generally ready to work with a significant degree of independence.

English 10 123 - 4 Credits

Academic - Grade 10

In English 10, students examine the ways that stories hand down ideas, lessons, and world views about what makes us human. This process of storytelling and our ability to communicate - in oral and written form - is one of the most valuable ways in which we teach one another every day. Our stories are what bring us together as humans, and also what set us apart as individuals. Essential questions that focus the way students examine literature in grade ten include: How do writers provide insights into human experience through fictional means? How do writers use literary techniques to convey their ideas? What does it mean to be human? As students read, write, and learn about an author's craft, they come to understand that: writers often provide insights into human experience through fictional means; writers use literary techniques to convey their ideas; careful, close reading helps us make meaning from a text; writers write with purpose to a specific audience. Major texts include, but are not limited to: *The Adoration of Jenna Fox* by Mary Pearson, *Things Fall Apart* by Chinua Achebe, *All American Boys* by Jason Reynolds and Brendan Kiely, *Macbeth* by William Shakespeare, *Outliers* by Malcolm Gladwell, *The Curious Incident of the Dog in the Night-Time* by Mark Haddon, as well as much poetry, short fiction, and non-fiction selections.

English 10 121 - 4 Credits

Honors - Grade 10

In English 10, students examine the ways that stories hand down ideas, lessons, and world views about what makes us human. This process of storytelling and our ability to communicate - in oral and written form - is one of the most valuable ways in which we teach one another every day. Our stories are what bring us together as humans, and also what set us apart as individuals. While students focus on the same themes and literacy skills as students in Academic English 10, they are held to higher expectations regarding academic independence as well as the complexity and quantity of texts they read and write throughout the year. Essential questions that focus the way students examine literature in grade ten include: How do writers provide insights into human experience through fictional means? How do writers use literary techniques to convey their ideas? What does it mean to be human? As students read, write, and learn about an author's craft, they come to understand that: writers often provide insights into human experience through fictional means; writers use literary techniques to convey their ideas; careful, close reading helps us make meaning from a text; writers write with purpose to a specific audience. Major texts include, but are not limited to: *A Thousand Splendid Suns* by Khaled Hosseini, *Things Fall Apart* by Chinua Achebe, *To Kill A Mockingbird* by Harper Lee, Macbeth by William Shakespeare, *Outliers* by Malcolm Gladwell, *The Curious Incident of the Dog in the Night-Time* by Mark Haddon, as well as much poetry, short fiction, and non-fiction selections.

Essentials of English 11/12 196 - 4 Credits

Academic - Grades 11/12

While this course shares learning outcomes and themes with other 11th and 12th grade English Language Arts courses, it is designed with the structures and supports necessary to meet the specific needs of juniors and seniors who struggle significantly with their literacy skills. Particular emphasis is placed on the development of student's reading comprehension, language skills (including vocabulary knowledge and development) and critical thinking skills. By exploring various themes through multiple genres of text (fiction, literary non-fiction, poetry, and film) students refine their writing skills and complete analytical, persuasive, and expository essays, along with personal and creative writing and a research paper.

Coming-of-Age Literature 143 - 4 Credits

Academic - Grades 11/12

Coming-of-age literature focuses on the transition from childhood to adulthood. Students examine their own coming-of-age journeys while studying selected texts from this genre. They examine the turning points in their lives, and in literary characters' lives, that determine individual paths to adulthood. Through literature and writing, students discuss how families, friends, societies, and psychologies shape peoples' morals and values. Finally, the class examines what it truly means to be an adult, and how one knows when he or she has achieved "adulthood." Major texts may include, but are not limited to, "The Body" by Stephen King, Frankenstein by Mary Shelley, Room by Emma Donoghue, Hamlet by William Shakespeare, as well as high-interest short stories, essays, and poems, and films. This course helps students develop the reading comprehension and writing skills needed in college and the workplace. Through personal writing, analytical essays, and business writing, students develop critical thinking skills and the ability to revise and improve their writing.

Coming-of-Age Literature 141 - 4 Credits

Honors - Grades 11/12

Coming-of-age literature focuses on the transition from childhood to adulthood. Students examine their own coming-of-age journeys while studying selected texts from this genre. They examine the turning points in their lives, and in literary characters' lives, that determine individual paths to adulthood. Through literature and writing, students discuss how families, friends, societies, and psychologies shape peoples' morals and values. Finally, the class examines what it truly means to be an adult, and how one knows when he or she has achieved "adulthood." Major texts may include, but are not limited to, "The Body" by Stephen King, Room by Emma Donoghue, Hamlet by William Shakespeare, Frankenstein by Mary Shelley, Another Brooklyn by Jacqueline Woodson, as well as high-interest short stories, essays, and poems, and films. Students take greater responsibility for their learning. In this honors level course, students are expected to think more expansively, to draw comparisons among literary texts from different times and places, and to explore the significance of characters and themes to their own lives. Student writing includes persuasive, expository, personal, and analytical essays. Students work to make their writing more precise, concise, and concrete, as well as to develop a sense of their personal voice.

Dystopian Literature 141A - 4 Credits

Honors - Grades 11/12

Dystopian literature focuses on futuristic, "seemingly perfect" societies, but as readers soon find out, there is nothing perfect or free about these societies. These "perfect" societies face the same problems citizens face today, but they have often chosen solutions that have dire consequences. Students in this course examine the use of propaganda, the restriction of freedom, the constant surveillance, and the dehumanized state of these societies in short stories, novels, and films. While some of these texts are science fiction, not all of the reading falls into that category. Students read texts by Suzanne Collins, Margaret Atwood, Ray Bradbury, and many other accomplished writers. In their senior year, students take greater responsibility for their learning. In this honors level course students are expected to think more expansively: to draw comparisons among literary texts from different times and places, and to explore the significance of characters and themes to their own lives. Student writing includes persuasive, expository, personal, and analytical essays. Students work to make their writing more precise, concise, and concrete, and to develop a sense of their personal voice.

Storytellers 147 - 4 Credits (Offered alternate years; next offered 2025-2026)

Academic - Grades 11/12

Storytellers explores the role that storytelling plays in our lives and its expression in literature. Throughout their studies, students consider: What is the power of the individual voice to make change? What roles do stories play in our lives? What is the story and who gets to tell it? How do the stories we tell and the language we use define who we are and how we think? The course helps students hone strategies for closely reading in order to comprehend, enjoy, and learn from many different types of complex texts, including short stories, drama, novels, poetry, movies, songs and personal essays. This course helps students develop the reading comprehension and writing skills needed in college and the workplace. Students develop writing skills by practicing personal and analytical writing. They strengthen grammar and technical writing skills, develop structures for analytical thinking and writing, and learn strategies for using important details to support ideas in speaking and writing. Major texts may include, but are not limited to: The Great Gatsby by F. Scott Fitzgerald, The Things They Carried by Tim O'Brien, Twelfth Night by William Shakespeare, and the film Big Fish.

Storytellers 145 - 4 Credits (Offered alternate years; next offered 2025-2026)

Honors - Grades 11/12

This course explores the role that storytelling plays in our lives and its expression in literature. Throughout their studies, students consider: What is the power of the individual voice to make change? What roles do stories play in our lives? What is the story and who gets to tell it? How do the stories we tell and the language we use define who we are and how we think? The course helps students hone strategies for closely reading in order to comprehend, enjoy, and learn from many different types of complex texts, including short stories, drama, novels, poetry, movies, songs and personal essays. Students develop writing skills by practicing personal and analytical writing. They will also strengthen grammar and technical writing skills, develop structures for analytical thinking and writing, and learn strategies for using important details to support ideas in speaking and writing. Major texts may include, but are not limited to: The Great Gatsby by F. Scott Fitzgerald, The Things They Carried by Tim O'Brien, Twelfth Night by William Shakespeare, Strength in What Remains by Tracy Kidder, and the film Big Fish.

Linguistics and Media Studies 146 - 4 Credits (Offered alternate years; next offered 2025-2026)

Academic - Grades 11/12

Linguistics and Media Studies students study language and how it operates in entertainment, social media, politics, marketing, and our interpersonal relationships. The course allows students to develop their literary, historical, and scientific analysis skills through a field that is rapidly growing due to the high demand for people with linguistics backgrounds in our increasingly multicultural world. Students build an understanding of the role of media and language in society as well as essential skills of inquiry and self-expression necessary for citizens of a democracy. Students in this course examine the building blocks of language, study how it is used in various regional and ethnic communities and among individuals, and how language changes over time. Students will use film, television, and print to uncover how messages are crafted to inform or persuade audiences.

Linguistics and Media Studies 144 - 4 Credits

Honors - Grades 11/12

Honors Linguistics and Media Studies students study language and how it operates in entertainment, social media, politics, marketing, and our interpersonal relationships. The course allows students to develop their literary, historical, and scientific analysis skills through a field that is rapidly growing due to the high demand for people with linguistics backgrounds in our increasingly multicultural world. Students build an understanding of the role of media and language in society as well as essential skills of inquiry and self-expression necessary for citizens of a democracy. Students in this course examine the building blocks of language, study how it is used in various regional and ethnic communities and among individuals, and how language changes over time. Students will use film, television, and print to uncover how messages are crafted to inform or persuade audiences. Honors students are held to higher expectations regarding academic independence as well as the complexity and quantity of texts they read and write throughout the year.

Advanced Placement Language and Composition 148 - 4 Credits

Advanced Placement - Grades 11/12

In this reading and writing intensive class, students become close, careful readers of rhetoric. Students will explore speeches, essays, letters, and advertisements from a wide variety of time periods through careful analysis of the writer's style and rhetorical techniques. They will read works from authors like Abraham Lincoln, Henry David Thoreau, Martin Luther King, Jr., Rebecca Traister, Chanel Miller, Clint Smith, Tim O'Brien, and Nikole Hannah-Jones. Course components include: Rhetorical analysis: looking closely at non-fiction (e.g. syntax, appeals to ethos, pathos, and logos, the rhetorical triangle, and structure of rhetorical works). Discussions about rhetorical strategies: how do others create arguments, and how we can analyze and write about arguments. Frequent book clubs, regular rhetorical writing, graded student-led discussions, independent field trips. Preparation for an AP exam in May with the possibility of earning college credit,

Advanced Placement English Literature and Composition 151 - 4 Credits

Advanced Placement - Grade 11/12

In this reading and writing intensive class, students will work to become close, careful readers of literature. Students will explore novels, plays, short stories, and poetry from a wide variety of time periods through careful analysis of the writer's style and literary techniques. They' will read works from authors like Jane Austen, Mary Shelley, William Shakespeare, Toni Morrison, Clint Smith, and Margaret Atwood. Course components include: Literary analysis: looking closely at fiction and poetry (e.g. character, setting, narration, and structure of literary works). Discussion about the author's craft: how do writers create meaning, and how can we analyze and write

about literature. Frequent book clubs, regular analytical writing, graded student-led discussions, literary field trips. Preparation for an AP exam in May with the possibility of earning college credit.

#### SPECIALTY ELECTIVE ENGLISH COURSES

Creative Writing 8 - 187

Academic Elective - Grade 8 - Semester

By focusing in on one type of writing at a time - a genre - students in this elective study how particular kinds of writers shape their ideas into the written word. Over the course of the semester, students read both extended and short texts, unlocking the key to successful writing. How does a successful biographer, columnist, or short story author write so well? What are the keys to writing great memoirs, graphic novels, or children's stories? As students develop a deeper understanding of each writer's craft, they begin to read like writers. In turn, inspired and influenced by the writers they have studied, students churn out great writing of their own.

Creative Writing I 110 - 2 Credits

Academic Elective - Grades 9-12 - Semester

Students with interest in writing and its process work in class and at home to improve their skill and style. Responses to reading, both formal and informal, help to structure the curriculum. Students are expected to participate actively by sharing their writing, contributing to class discussion, and critiquing each other's work. The course focuses on the personal essay with additional exposure to short stories, poetry, and drama.

Creative Writing II: Workshop for Publishing 109 - 2 Credits

Academic Elective - Grades 10-12 - Semester

Designed for writers who aspire to sharpen their craft and take their work to publication, this course combines with Creative Writing I. While students work in alongside their peers on poetry, fiction and narrative nonfiction, the curriculum remains flexible enough for each student to focus in on a genre of choice and pursue publication. Fiction writers examine fundamental storytelling components including character, place, plot, structure, voice, dialogue, and point of view. Poets work each day to silence the editor in order to access original language and creative ideas, and then revive the editor to craft the beauty and wisdom of the poems. Nonfiction writers explore realms of truth, fact, and fiction as they read and write memoirs, profiles and stories of adventure, challenge, love, friendship, heartache, triumph and opportunity. Throughout the course, students read and study published works both for inspiration and to learn more about the craft. In a writers' workshop format, students provide feedback on one another's drafts in a communal and structured space that builds understanding of audience, voice, and style. Students also learn about the publication process, and are expected to submit their work for editorial review and publication.

Big Red Journalism 152 - 4 Credits

Academic Elective - Grades 9-12

Journalism students produce and curate content for the The Big Red, (<a href="www.bigredhawks.com">www.bigredhawks.com</a>) an online newspaper that informs and represents Hudson High students. Acting as a news team, students learn about all phases of the journalistic process including news judgment, reporting, writing, and editing. Students learn to write hard news, features, profiles, sports news, and reviews, while applying ethical standards to their coverage. They cover school events and games on Instagram and create a digital copy using WordPress to lay out our online paper. Photojournalists practice photo-editing skills with Adobe Lightroom to accompany articles and photo galleries. Through these experiences, students develop an understanding of the rights and responsibilities of journalism, study freedom of the press and media bias, and learn about legal restrictions placed on student newspapers. Additionally, the class works collaboratively with Broadcast Production. Together, the classes produce video content for both HUD-TV and The Big Red. Students are encouraged to take one or both of these courses, as they teach complementary media production skills.

Advanced Big Red Journalism 167 - 4 Credits

Honors Elective - Grades 10-12

Students who have successfully completed Journalism and want a leadership role at The Big Red should sign up for this honors level course. Advanced students lead teams of new journalists and plan the production of the newspaper on the web. As team leaders, they help new journalists find story ideas and sources while improve their writing, photographs, and graphic design. As editors, they learn about

editors' roles and responsibilities as well as the ethical dilemmas they often face. This course may be taken over consecutive years, with students assuming increased responsibility for the newspaper's management each year.

Academic Literacy 8 171

Academic - Grade 8 - Semester

Designed specifically for students who struggle with their reading and writing skills, this class focuses on accelerating the fluency and comprehension skills of students who read below grade level. Instruction focuses on academic literacy skills that students must possess to achieve success across all disciplines and in standardized testing. Students work to develop skills and habits of effective readers and writers through instruction that emphasizes vocabulary development, comprehension strategies, and sustained reading.

# HISTORY and SOCIAL STUDIES

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While reading, writing, discussing, and thinking deeply about the past as well as their cultural and physical environment, we instruct students in the development of skills, knowledge, and dispositions necessary for informed and engaged civic lives.

The History and Social Studies department offers a wide range of courses that aim to prepare students for college and career, while developing their civic competence - the skills, knowledge, and dispositions we must all possess to be effective participants in our democracy, striving to create an ever more just society through nonviolent political and social action. Instruction that is aligned to the Massachusetts History and Social Studies Framework provides students with ongoing practice in reading, writing, speaking, and listening, as well as routine opportunities to showcase these skills through authentic assessment activities.

Students are required to take a core course from grades 8 through 11 and may take additional electives each year. In eighth grade Civics, students explore the foundations of US government and take on a Civic Action Project that provides authentic experience in effecting political or social change. Then, in their subsequent three years, US and World History are woven together; while a US narrative threads each course, events and themes in global history are examined. We explore how other nations have impacted the US, and how our nation has influenced the world. In this way, students understand how economic, political, and cultural forces increasingly "globalize" our world. Meanwhile, though a diversity of narratives, students view history unfold through multiple lenses. Students who opt to take electives can choose from a wide selection of courses which expand their thinking and help develop skills and perspectives to navigate their way through our increasingly complex world. In all core courses and most electives, students routinely follow the news, researching the history behind current events and identifying how trends or themes bridge our history. Through current events and other classroom exercises, students frequently practice seeking credible information and using sources in an ethical manner.

Across each year, core history and English Language Arts courses share some common themes. For instance, in grade 8, themes of personal, cultural, and political identity are explored through literature in English class and through the study of citizenship in Civics. Additionally, this humanities experience extends to instruction in core skill areas called Habits of Mind that serve students well beyond their classroom walls. We emphasize routine reflection on the development of these skills to help each student track growth and set goals to become: an effective speaker and writer, a critical thinker, an effective collaborator, a creative and innovative thinker, and an independent learner.

	Core Course Offerings	Elective Course Offerings and Pathways
Grade 8	Civics: Citizenship in Action - Academic	Human Behavior and Relationships Electives: Conflict Resolution - Academic
Grade	US and The World History I - Academic	Sociology - Academic Psychology - Academic
9	US and The World History I - Honors	Abnormal Psychology - Academic Advanced Placement Psychology
Grade	US and The World History II - Academic	World Cultures and Economics Electives:
10	US and The World History II - Honors	Cultural Anthropology: Traditional People, Modern Challenges - Academic
Grade	US and The World History III - Academic	Money, Capital, Consumption: Understanding the Economy - Academic
11	US and The World History III - Honors	
Grades 11-12	Advanced Placement United States History	

Grades 9-11	Essentials of US/World History - Academic	Law, History, and Current Issues Electives: Contemporary World Issues - Academic History Goes to Hollywood - Academic Contemporary Legal Issues - Academic A Call to Action: Civic-Engagement through Service-Learning - Academic Advanced Placement United States Government & Politics Advanced Placement Seminar: Research to Solve Real World Problems
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#### CORE SOCIAL STUDIES COURSES

Grade 8 Social Studies: Civics - Citizenship in Action 384

Academic - Grade 8

This course explores the roots of American democracy, the role of citizens, and the institutions of American government. The course's first unit serves as a foundation, as students examine their own personal identity and their role as a part of a community. Students then explore the process by which American colonists formed a new independent society and the foundations of democratic government. Afterwards, the course examine the major principles and structures of American government. Finally, students study how the rights of American citizens have changed overtime and how to apply the skills of citizenship in a real world context. In the process, students hone their reading, writing, speaking, and listening skills to enable them to think and express their ideas as active citizens. Essential questions that focus the course include: What does it mean to be an active citizen? How do Americans work toward the common good?

US and The World History I 326 - 4 Credits

Academic - Grade 9

This course begins by examining the era studied in grade 8 Civics but on an international stage. The American Revolution is viewed as a forerunner to subsequent revolutions throughout the Western world. Throughout the 19th Century, then, the unique history of our nation unfolded on a world stage on which it increasingly became a major player. As students study this history, they develop their abilities to read, think, and express themselves as historians. Students explore the following questions throughout each unit: What are my rights and responsibilities as a citizen of Hudson, the United States, and the world? How can beliefs and ideas affect change? How does the distribution of power shape society? How have geography, technology, and economics influenced historical events?

US and The World History I 327 - 4 Credits

Honors - Grade 9

This course begins by examining the era studied in grade 8 Civics but on an international stage. The American Revolution is viewed as a forerunner to subsequent revolutions throughout the Western world. Throughout the 19th Century, then, the unique history of our nation unfolded on a world stage on which it increasingly became a major player. As students study this history, they develop their abilities to read and think, and express themselves as historians. Honors students explore the same content as those in the academic program, but are expected to work with more independence as they read, research, and write about social, political, economic, and cultural issues that arise throughout the course. Students explore the following questions throughout each unit: What are my rights and responsibilities as a citizen of Hudson, the United States, and the world? How can beliefs and ideas affect change? How does the distribution of power shape society? How have geography, technology, and economics influence historical events?

US and The World History II 301 - 4 Credits

Academic - Grade 10

This course examines our nation's history in the context of the international forces that shaped it, from the end of the 19th Century through the end of World War II. Throughout their studies, students consider various concepts related to power, progress and humanity in the context of global industrialism, imperialism, and world war. Students develop critical reading, writing, and research skills by examining a wide variety of both primary and secondary source documents. They develop and employ historical thinking skills to understand the history of the increasingly complex and globalized world in which they live.

US and The World History II 302 - 4 Credits

Honors - Grade 10

This course examines our nation's history in the context of the international forces that shaped it, from the end of the 19th Century through the end of the World War II. Throughout the course, students consider various concepts related to power, progress and humanity in the context of global industrialism, imperialism, and world war. Students develop critical reading, writing, and research, skills by examining a wide variety of both primary and secondary source documents. They employ historical thinking skills to understand the history of the increasingly complex and globalized world in which they live. Honors students explore the same content as those in the academic program, but are expected to work with more independence as they read, research, and write about social, political, economic, and cultural issues that arise throughout the course.

US and The World History III 328 - 4 Credits

Academic - Grade 11

Students in this course study historical developments in the United States and in other countries, as well as international relations, from the end of WWII to the present. Major course themes include the creation of national identity and interdependence in the Cold War era, attempts at progress and the relationship between governments and people, the realignment of alliances after the end of the Cold War, and the emergence of globalization and terrorism. Students examine the role of United States power in the post-WWII world and evaluate what role the US should take in the global arena today. Students utilize historical thinking to assess change and continuity in society and engage in decision-making analysis. Through simulations, discussions, primary and secondary source analysis, and examination of literature and film, students experience global events from a variety of historical perspectives. The goal of the course is to provide students with the opportunity to become more informed and engaged participants in the global community.

US and The World History III 329 - 4 Credits

Honors - Grade 11

Students in this course study historical developments in the United States and in other countries, as well as international relations, from the end of WWII to the present. Major course themes include the creation of national identity and interdependence in the Cold War era, attempts at progress and the relationship between governments and people, the realignment of alliances after the end of the Cold War, and the emergence of globalization and terrorism. Students examine the role of United States power in the post-WWII world and evaluate what role the US should take in the global arena. Students utilize historical thinking to assess change and continuity in society and engage in decision-making analysis. Through simulations, discussions, primary and secondary source analysis, and examination of literature and film, students experience global events from a variety of historical perspectives. The goal of the course is to provide students with the opportunity to become more informed and engaged participants in the global community. Students in this honors course explore the same content as the academic program, but they move at a faster pace, go into greater depth, engage in more independent work, demonstrate strong interest and inquiry, and publicly share their ideas and work on a regular basis.

Advanced Placement United States History 320 - 4 Credits

Advanced Placement - Grades 11-12

Advanced Placement United States History is the equivalent of a first-year college US history survey course. Throughout the year, students examine the political, social, economic, and cultural changes that have occurred in US history. The course emphasizes historical thinking skills, writing, primary/secondary source analysis, and historiography, and prepares students for the Advanced Placement United States History test, which enrolled students are required to take in May. Throughout the year, students are expected to take on the responsibility of independent learning, a skill necessary for success at the next academic level.

Essentials of US/World History 391 - 4 Credits

Academic - Grade 9-11

This course is designed for grade 9-11 students who benefit from specialized instruction in the study of US and World History in the 18th to 20th Centuries. While this course is aligned to common standards and covers content comparable to grades 9, 10 and 11 US and the World History courses, students in this course have supports designed to meet the specific literacy needs with which they struggle. This course examines our nation's history and some of the international forces that shaped it, from the founding of our nation to today.

#### SPECIALTY ELECTIVE SOCIAL STUDIES COURSES

Cultural Anthropology: Traditional People-Modern Challenges 310 - 2 Credits

Academic Elective - Grades 10-12 - Semester

Culture is systems of shared meaning. People learn and share things over the course of generations, and that is how culture develops. By examining the components of culture shared by a group, Cultural Anthropology students will begin to understand how these components define the people who follow them. As students explored the beliefs, practices and organization of traditional societies they will reflect on their own cultural norms and values. In a world where traditional societies are disappearing at a rapid rate students will consider what can be gained from preserving the ways of life of traditional peoples and how modernization is impacted their cultural practices. Amongst the people and questions students will explore: What role does body art play in Maori culture? How have the Aborigines been able to exist for +40,000 years on the island of Australia?

Conflict Resolution: Leadership through Mediation 364 - 4 Credits

Academic Elective - Grades 9-12

Conflict is a normal part of life that we encounter in our relationships with friends, family, and classmates. Conflict also exists between different groups in our communities and at the global level between and within nations. Good leadership is essential at all of these levels to ensure that conflicts are dealt with constructively rather than destructively. This course explores the phenomenon of conflict, focusing on various nonviolent strategies for managing, resolving, and transforming it. Major areas of study include causes of conflict, individual conflict styles, mediation, negotiation, and arbitration strategies, and techniques for effectively preventing conflict. Students taking this course are trained as peer mediators who support students in resolving interpersonal conflicts, and also teach a variety of conflict prevention lessons throughout our school community over the course of the year. Skills gained in this course - including interpersonal communication, analysis, presentation/teaching, and mediation/conflict resolution - will continue to be relevant and useful in students' relationships, education, and workplace. *The curriculum for this course includes a Civic Action Project. Successful completion of this project fulfills the CAP graduation requirement*.

Sociology 344 - 4 Credits

Academic Elective - Grades 10-12

Sociology is the study of how human beings are shaped by their social environment. Every society has specific systems that have been created to allow us to live together in an organized and coherent way rather than in chaos - sociology creates the opportunity for us to investigate these systems. In doing so, we gain a deeper understanding of ourselves and the world we live in. The course begins by examining sociological theories and learning the research methods used by social scientists. Students then put their knowledge to work in their examination of topics such as culture, socialization and social development, social institutions (including the family, media, educational system, and religious organizations), conformity and deviance, and diversity. Students are expected to hone a variety of academic and social skills in the course. Therefore, they write and read extensively, participate thoughtfully in a variety of discussion styles and activities, engage in simulations, give presentations, and execute authentic research projects. The curriculum for this course includes a Civic Action Project. Successful completion of this project fulfills the CAP graduation requirement.

Psychology 346 - 4 Credits

Academic Elective - Grades 10-12

Psychology is the study of human behavior and mental processes. This survey course presents an overview of topics, including the history of psychology, the brain and behavior, sensation and perception, learning, memory, abnormal psychology, states of consciousness, and social psychology. Unit assessments include exams, formal writing pieces, and both group and individual projects. A major goal of the course is to increase students' understanding of why people do what they do and think what they think. Students can also expect to learn how psychology applies to their own lives. Students develop speaking, writing, reading, and listening skills through class discussion, frequent readings, class simulations and demonstrations, popular film, and both formal and informal writing assignments. *The curriculum for this course includes a Civic Action Project. Successful completion of this project fulfills the CAP graduation requirement.* 

Abnormal Psychology 366 - 2 Credits

Academic Elective - Grades 10-12 - Semester

This semester long course investigates the different categories of mental disorders as defined by the current Diagnostic Statistical Manual (DSM). Symptoms, diagnosis, and treatment of mood, personality, anxiety, schizophrenic, and developmental disorders are studied

through readings, films, and case studies. Major goals of the course are for students to recognize common misconceptions about mental illness, to understand the prevalence of mental illness in the United States, and to investigate the ethics of diagnosis and treatment. Students also develop their skills through discussion, reading, writing, research, and presentations. The course culminates in a service-learning project intended to raise community awareness of mental illness.

Advanced Placement Psychology 351 - 4 Credits

Advanced Placement Elective - Grades 10-12

This survey course provides students with the opportunity to explore different areas in the world of psychology. Students work together to learn about the major areas associated with human thought and behavior. From Freud to Skinner to Piaget, students examine classical theories of psychology and investigate fourteen units of study, including the brain and behavior, learning, sensation and perception, cognition, abnormal behavior, and social psychology. Students question why people act and feel the way they do and what motivates behavior. Together, students work to achieve a primary goal of psychology: a great understanding of the human mind and behavior. Additionally, students leave the course with a greater understanding of themselves. Students are expected to read and write independently in this fast-paced course. Students can expect frequent multiple choice exams, along with frequent practice and assessment of Free Response Questions (FRQ's) designed to prepare students for the AP Psychology exam. As students work to develop their ability to read and analyze a college-level text, listening, reading, and writing skills are emphasized throughout the course. This course is equivalent to an introductory college course in psychology and prepares students to take the AP Psychology exam in May, a requirement of all students enrolled in the class.

 $Money, \ Capital, \ Consumption: \ Understanding \ the \ Economy \ 307-2 \ Credits$ 

Academic Elective - Grades 10-12 - Semester

It's everywhere, except it does not grow in trees. Money. We all need it and want it to certain degrees, but how well do we really understand it? In this course, students will make sense of how money works by developing an understanding of fundamental economic ideas and reasoning. In doing so, students will tackle questions, big and small: Why are Apple AirPods so expensive? Why was there a shortage of toilet paper during the pandemic? Should the minimum wage be raised? Why have prices gone up so much in the last few years? Should I do my homework or binge watch that show on Netflix? Answering each of these questions requires a kind of economic reasoning. In short, economics is the study of decision making in a world with limited resources. You can only take seven classes at a time at HHS. If you choose to take this one, you are giving up the opportunity to take a different course. Which class will you take? Your economics lesson has already begun. The curriculum for this course includes a Civic Action Project. Successful completion of this project fulfills the CAP graduation requirement.

Contemporary World Issues 370 - 2 Credits

Academic Elective - Grades 8-9 - Semester

This course introduces students to issues that influence our lives as both citizens of the US and the World. Students will investigate a variety of topics, including the pressing economic, environmental, health, and human rights issues of our age. Each class is designed around the unique interests of its students, as they participate in a decision making process to identify the areas of focus. We will examine issues from multiple angles and through multiple sources with the goals of both formulating a point of view and developing the skills necessary to ask critical questions. Using a variety of media, the course emphasizes reading, writing, speaking, listening, and leadership skills.

History Goes to Hollywood 440 - 2 Credits

Academic Elective - Grades 10-12 - Semester

Lights, camera, action! For nearly a century, Hollywood films have been a source of entertainment for America and the world; millions of people each week pack theaters across the globe. However, directors, producers, and actors also use movies to provide commentary on political, cultural, and social developments of the time. In this way, movies become important historical artifacts that shape history and provide critical insight into the study of history. In this course, students will study different eras of American history, and analyze important films made in that time period, seeking to understand how the film is a "moving image document." Whether it be a Hollywood movie, a Netflix show, a commercial, or a simple YouTube video, once students learn to deconstruct the moving image, they will look at all media in a whole new light.

Contemporary Legal Issues 345 - 2 Credits

Academic Elective - Grades 10-12 - Semester

Contemporary Legal Issues introduces students to the justice system through an analysis of current topics and cases in the news. Investigation of legal fields including constitutional, criminal, family, and workplace law allow students to understand how the legal system works and its role in their lives. Through an exploration of the corrections system and a field trip to Norfolk Prison, students wrestle with questions of when and how justice is served. A major goal of the course is for students to think critically about how the legal system is currently implemented and the role played by individual lawmakers, criminal justice professionals, and citizens. Research, analysis of current events, discussions, debates and seminars are important components of the class. Mock trials, field trips, simulations, and guest speakers are also critical to student learning. Students wishing to earn honors credit may contract to fulfill additional requirements, including research on the impact of Supreme Court decisions and presentations of a series of current events.

A Call to Action: Civic-Engagement through Service-Learning 342 - 2 Credits

Academic Elective - Grades 10-12 - Semester

In this hands-on, student-driven course students design, plan and implement projects that make a difference in their community. While the teacher guides and advises student projects, the course is driven by student interest and investment. Through their service-learning projects, students develop skills in civic participation and a sense of civic efficacy. While the course extends beyond the classroom walls, students also learn from guest speakers, documentaries, current events, and one another. They gain a greater awareness of the social issues at the local, national, and international level as they truly become problem-solving citizens. *The curriculum for this course includes a Civic Action Project. Successful completion of this project fulfills the CAP graduation requirement.* 

United States Government & Politics 239 - 4 Credits

Advanced Placement Elective - Grades 11-12

This course gives students an analytical perspective on government and politics in the United States, including the study of general concepts used to interpret US politics and the analysis of specific examples. The course develops students' familiarity with the various institutions, groups, beliefs, and ideas that constitute US politics. Topics such as constitutional underpinnings of United States Government, political beliefs and political behaviors, public policy, institutions of national government, civil rights, and civil liberties are covered in this course. This course requires students to answer analytical and interpretive free-response questions on a frequent basis, along with practice analyzing and interpreting data and other information relative to US government and politics. Students are required to take the AP exam in United States Government and Politics in May. The curriculum for this course includes a Civic Action Project. Successful completion of this project fulfills the CAP graduation requirement.

AP Seminar: Research to Solve Real World Problems 105 - 4 Credits

Advanced Placement - Grades 10-12

AP Seminar is an interdisciplinary course designed to help students build research and argumentation skills to get ready for college, career and to make a difference in the world. Using an inquiry framework, students examine real-world issues through a variety of perspectives, analyzing the work of authors and researchers in many fields. Past research topics include strategies to reduce teen vaping, how to regulate the dark web, flaws in the American railway system, and how employers can support new parents. AP Seminar students practice synthesizing divergent perspectives and communicate their original arguments in writing and verbal presentations. Collaboration with peers is the backbone of the course, and students will also develop effective skills to work in a group. The curriculum for this course includes a Civic Action Project. Successful completion of this project fulfills the CAP graduation requirement.

## **MATHEMATICS**

Mr. Robert Knittle, PK-12 Director of Mathematics, 978-567-6100 ext. 41133 Email: rdknittle@hudson.k12.ma.us

Developing students who talk, write, and reason mathematically

The mission of the Hudson Mathematics Program is to create an environment where reflective students can think strategically, methodically, and analytically as independent and collaborative learners, thus enabling them to have solid transferable math, logic and literacy skills in all parts of their lives. Through these skills and enhanced by multiple models of learning, students will become lifelong learners who are prepared to meet the demands of their chosen profession and become an effective citizen in our global community. We believe in helping students to think critically and creatively, to solve rigorous and authentic problems and to collaborate effectively. Problem solving, logic and reasoning, along with communicating effectively through reading, writing and speaking the language of mathematics, are at the core of the Hudson High School math program. We will enable all students to thrive and succeed, in and beyond the classroom regardless of ability level, so that they can become productive citizens. Four years of mathematics is required for graduation. The minimum requirement in math for admission to Massachusetts state colleges is Algebra I, Geometry, and Algebra 2.

Each student should purchase a scientific calculator as these will be used frequently in class (through Geometry) and are allowed on standardized tests (MCAS, SATs & ACTs). The Texas Instruments graphing calculators are the most universally used model, and we recommend either the TI-84 Plus or the TI-84 Plus CE graphing calculator for all math classes post Geometry, and will support students in learning to use these calculators. Students will benefit from having their own calculator for use at school and at home. While there are smartphone applications that will have the same functionality as a Texas-Instruments graphing calculator, students are not permitted to use phones when taking high-stakes tests.

#### Course Offerings:

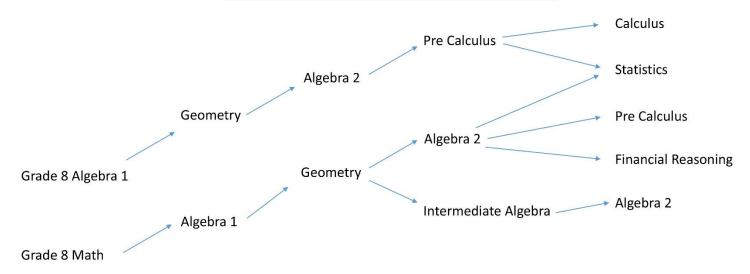
Math 8 - Academic	Pre-Calculus - Honors
Algebra I 8 - Honors	Calculus - Honors
Algebra I 9 - Academic	Advanced Placement Calculus AB
Algebra I 9 - Honors	Advanced Placement Calculus BC
Geometry - Academic	Financial Reasoning - Academic
Geometry - Honors	Financial Reasoning - Honors
Algebra II - Academic	Intermediate Algebra - Academic
Algebra II - Honors	Essentials of Math 8 - Academic
Statistics - Academic	Essentials of Algebra - Academic
Statistics - Honors	Essentials of Algebraic Geometry - Academic
Advanced Placement Statistics	Essentials of Advanced Math - Academic
Pre-Calculus - Academic	Integrated Math (Foundational EL)

#### **Movement Between Math Levels**

Students seeking to move from an academic level mathematics course into an honors level mathematics course must consistently earn a minimum grade of A- on academic level course assessments or obtain approval of the teacher and curriculum director.

For a student in an honors mathematics course to continue with an honors mathematics course the following year, the student must consistently earn a minimum grade of C- on honors level course assessments or obtain approval of the teacher and curriculum director.

## **Mathematical Course Avenues**



Depending on course trajectory, students may progress through our content at either the Academic or Honors level, and end with a pathway in Calculus, Statistics or Financial Reasoning. It may require a double-up of courses, or an individually needed pathway. We will help everyone be prepared for a successful post-secondary experience.

#### Math 8 285

Academic - Grade 8

Grade 8 mathematics is about (1) formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations; (2) grasping the concept of a function and using functions to describe quantitative relationships; (3) analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean theorem. Through the use of manipulatives, cooperative learning, and "real life" scenarios, students will study the following topics: Integer Exponents and Scientific Notation; The Concept of Congruence; Similarity; Linear Equations; Examples of Functions from Geometry; Linear Functions; Introduction to Irrational Numbers Using Geometry. Based on level of mastery students will move to Algebra I (Honors or Academic).

#### Algebra I 8 284

Honors - Grade 8 - Prerequisite: 7th Grade Math and teacher recommendation

This fast-paced course is for highly motivated students with a strong mathematical background in number sense, patterns, and functions; geometry and measurement; data and statistics; and integer manipulation. Students in this course will be expected to master both Grade 8 Math and Algebra 1 topics. Students will apply linear and quadratic models to data that exhibit these relationships and use various methods for analyzing, and solving these functions. Students will contrast linear and exponential relationships to deepen and extend their understanding of these models. Through the use of manipulatives, cooperative learning, and "real life" scenarios, students will study the following topics at an in-depth level: Congruent and Similar Shapes; Relationships between Quantities and Reasoning with Equations and Their Graphs; Linear and Exponential Functions; Polynomial and Quadratic Expressions, Equations, and Functions; A Synthesis of Modeling with Equations and Functions. Based on level of mastery students will move to Geometry (Honors or Academic).

Algebra I 213 - 4 Credits

Academic - Grades 9-10 - Prerequisite: Math 8

The fundamental purpose of this course is to formalize and extend the mathematics that students learned in the middle grades. Students will deepen and extend their understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend, and students engage in methods for analyzing, solving, and using quadratic functions. Through the use of manipulatives, cooperative learning, and "real life" scenarios, students will study the following topics: Relationships between Quantities and Reasoning with Equations and Their Graphs; Linear and Exponential Functions; Polynomial and Quadratic Expressions, Equations, and Functions; A Synthesis of Modeling with Equations and Functions. Based on level of mastery, students will move to Geometry (Honors or Academic).

#### Algebra I 215 - 4 Credits

Honors - Grades 9-10 - Prerequisite: Math 8 and teacher recommendation

The fundamental purpose of this course is to formalize and extend the mathematics that students learned in the middle grades. Students will deepen and extend their understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend, and students engage in methods for analyzing, solving, and using quadratic functions. Through the use of manipulatives, cooperative learning, and "real life" scenarios, students will study the following topics at an in-depth level: Relationships between Quantities and Reasoning with Equations and Their Graphs; Linear and Exponential Functions; Polynomial and Quadratic Expressions, Equations, and Functions; A Synthesis of Modeling with Equations and Functions. Based on level of mastery, students will move to Geometry (Honors or Academic).

Geometry 222 - 4 Credits

Academic - Grades 9-10 - Prerequisite: Algebra I

The fundamental purpose of this course is to formalize and extend students' geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving toward formal mathematical arguments. Through the use of manipulatives, cooperative learning, and "real life" scenarios, students will study the following topics: Congruence, Proof, and Constructions; Similarity, Proof, and Trigonometry; Extending to Three Dimensions; Connecting Algebra and Geometry Through Coordinates; Circles With and Without Coordinates. Based on level of mastery, students will move to Algebra II (Honors or Academic) or Intermediate Algebra (Academic).

#### Geometry 221 - 4 Credits

Honors - Grades 9-12 - Prerequisite: Algebra I and teacher recommendation

The fundamental purpose of this course is to formalize and extend students' geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving toward formal mathematical arguments. Through the use of manipulatives, cooperative learning, and "real life" scenarios, students will study the following topics at an in-depth level: Congruence, Proof, and Constructions; Similarity, Proof, and Trigonometry; Extending to Three Dimensions; Connecting Algebra and Geometry Through Coordinates; Circles With and Without Coordinates. Based on level of mastery, students will move to Algebra II (Honors or Academic).

#### Intermediate Algebra 248 - 4 credits

Academic - Grade 11 - Prerequisite: Geometry and teacher recommendation

This course is intended for students who have completed Algebra 1 and Geometry, but may not have built a solid mathematical foundation for the concepts that you will study in your college math courses. You will explore the relevance of mathematics to the real world through a variety of practical, real-life applications. Topics discussed in this course include several fundamental concepts of algebra including equations and inequalities, along with linear, quadratic, exponential functions, trigonometry, and discrete math. Emphasis will be placed on real-world applications of these topics and bringing mathematical thinking to life. The pace of this course will be fairly deliberate, recognizing the need to review previously learned concepts. TI 84/84 Plus graphing calculators will be used extensively to assist students in understanding new concepts and in completing assignments. Based on level of mastery, students will move to Algebra 2 Senior year, and possibly Statistics.

Algebra II 233 - 4 Credits

Academic - Grades 10-12- Prerequisite: Geometry

Building on their work with linear, quadratic, and exponential functions, students will extend their repertoire of functions to include polynomial, rational, trigonometric, and logarithmic functions. Students work closely with the expressions that define the functions and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. Through the use of manipulatives, cooperative learning, and "real life" scenarios, students will study the following topics: Polynomial, Rational, and Radical Relationships; Trigonometric Functions; Exponential and Logarithmic Functions. Based on level of mastery, students will move to Pre-Calculus (Honors or Academic) or Statistics.

Algebra II 234 - 4 Credits

Honors - Grades 9-12 - Prerequisite: Geometry and teacher recommendation

Building on their work with linear, quadratic, and exponential functions, students will extend their repertoire of functions to include polynomial, rational, trigonometric, and logarithmic functions. Students work closely with the expressions that define the functions and continue to expand and hone their abilities to model situations and to solve equations, including solving quadratic equations over the set of complex numbers and solving exponential equations using the properties of logarithms. Through the use of manipulatives, cooperative learning, and "real life" scenarios, students will study the following topics at an in-depth level: Polynomial, Rational, and Radical Relationships; Trigonometric Functions; Exponential and Logarithmic Functions. Based on level of mastery, students will move to Pre-Calculus (Honors or Academic) or Statistics.

Statistics 249 - 4 Credits

Academic - Grade 12 - Prerequisite: Algebra II or teacher recommendation

This course will explore statistical basics and applications to other academic disciplines. The focus will be on data collection, interpretation and probability. Descriptive analysis will be conducted through simulated activities.

Statistics 250 - 4 Credits

Honors - Grade 12 - Prerequisite: Algebra II and teacher recommendation

Students will learn fundamental concepts of statistical analysis and basic mathematical modeling. Additionally, students will learn about probability concepts and explore the fundamentals of random probability and study the basics of statistical inference. Practical problems will be discussed throughout the course.

Advanced Placement Statistics 253 - 4 Credits

Advanced Placement - Grades 11-12 - Prerequisite: Honors Algebra II and teacher recommendation

Students in this course will be required to take the AP Statistics Test. A TI-83 or 84 calculator is required for this course. AP Statistics is an applied mathematics course for advanced juniors and seniors. Topics include examining distributions, examining relationships, producing data, determining sampling distributions, and generating probability. Estimation, hypotheses testing and interval estimation with application to classical models will also be studied. Laboratories include activity based learning and computer usage.

Pre-Calculus 232 - 4 Credits

Academic - Grades 11-12 - Prerequisite: Algebra II

Extending their understanding of complex numbers to points in the complex plane, students will come to understand that a point in the plane can be identified with a complex number and that multiplying a number a + bi by a complex number z amounts to rotating and dilating the associated point z and z in the plane about the origin. Matrices are studied as tools for performing rotations and reflections of the coordinate plane, as well as for solving systems of linear equations. Inverse functions are explored as students further study the relationship between exponential and logarithmic functions and restrict the domain of the trigonometric functions to allow for their inverses. Throughout the course students will have the opportunity to strengthen and refresh their algebra skills and expand their knowledge and use of graphing calculators. Through the use of manipulatives, cooperative learning, and "real life" scenarios, students will study the following topics: Complex Numbers and Transformations; Vectors and Matrices; Rational and Exponential Functions; Trigonometry. Based on level of mastery, students will move to Financial Reasoning, Calculus or Statistics.

Pre-Calculus 231 - 4 Credits

Honors - Grades 10-12 - Prerequisite: Algebra II and teacher recommendation

Extending their understanding of complex numbers to points in the complex plane, students will come to understand that a point in the plane can be identified with a complex number and that multiplying a number a + bi by a complex number z amounts to rotating and dilating the associated point (a, b) in the plane about the origin. Matrices are studied as tools for performing rotations and reflections of the coordinate plane, as well as for solving systems of linear equations. Inverse functions are explored as students further study the relationship between exponential and logarithmic functions and restrict the domain of the trigonometric functions to allow for their inverses. Throughout the course students will have the opportunity to strengthen and refresh their algebra skills and expand their knowledge and use of graphing calculators. Through the use of manipulatives, cooperative learning, and "real life" scenarios, students will study the following topics at an in-depth level: Complex Numbers and Transformations; Vectors and Matrices; Rational and Exponential Functions; Trigonometry. Based on level of mastery, and student interest students will move to Financial Reasoning, Calculus or Statistics, including the Advanced Placement level.

Calculus 218 - 4 Credits

Honors - Grades 11-12 - Prerequisite: Pre-Calculus and/or teacher recommendation

This is an introductory calculus course designed for students who are interested in mathematics or science and planning to take calculus in college. Topics covered include a complete study of the derivation and integration of functions and their applications.

Advanced Placement Calculus AB 251 - 4 Credits

Advanced Placement - Grades 11-12 - Prerequisite: Honors Pre-Calculus and teacher recommendation

Students taking AP Calculus AB will be required to take the Advanced Placement Calculus AB test. A TI-83 or 84 calculator is required for this course. Calculus AB is equivalent to Calculus I in college. Advanced Placement Calculus AB is primarily concerned with developing the student's understanding of the concepts of calculus and providing experience with its methods and applications. The course emphasizes a multi-representational approach to calculus with concepts and problems being expressed graphically, numerically, analytically, and verbally.

Advanced Placement Calculus BC 254 - 4 Credits

Advanced Placement - Grades 11-12 - Prerequisite: Honors Pre-Calculus and teacher recommendation

Students taking AP Calculus BC will be required to take the Advanced Placement Calculus BC test. A TI-83 or 84 calculator is required for this course. Calculus BC is equivalent to Calculus I and II in college. This course will cover all the topics from Calculus AB 251 in addition to improper integrals, Taylor polynomials, Taylor series, parametric and polar functions.

Financial Reasoning 260 - 4 Credits

Academic - Grade 12 - Prerequisite: Algebra II or teacher recommendation

This course is a mathematical modeling course that is algebra-based, applications-oriented, and technology-dependent. The course addresses college preparatory mathematics topics through a variety of financial umbrellas. The course offers students multiple opportunities to use, construct, question, model, and interpret financial situations through symbolic algebraic representations, graphical representations, geometric representations, and verbal representations. The mathematical formulas, functions, and pictorial representations used, assist students in making sense of the financial world around them and equip them with the ability to make sound financial decisions. Through contextual problem solving and mathematical modeling of real-life situations, the course gives the students the motivation to persevere through routine and non-routine problems, and as a result, develop strength and confidence in their mathematics ability towards life-long learning. *Financial Reasoning* is a full-year CORE math class that can be taken to fulfill a student's graduation requirement. The course emphasizes the mathematical modeling of financial principles. If you are looking for an ELECTIVE course that emphasizes the knowledge and vocabulary required to make informed, independent financial decisions, consider *Personal Finance in Today's Economy* offered in the Technology/Business Department.

Financial Reasoning 261 - 4 Credits

Honors - Grade 12 - Prerequisite: Algebra II and teacher recommendation

This course is a mathematical modeling course that is algebra-based, applications-oriented, and technology-dependent. The course addresses college preparatory mathematics topics through a variety of financial umbrellas. The course offers students multiple opportunities to use, construct, question, model, and interpret financial situations through symbolic algebraic representations, graphical

representations, geometric representations, and verbal representations. The mathematical formulas, functions, and pictorial representations used assist students in making sense of the financial world around them and equip them with the ability to make sound financial decisions. Through contextual problem solving and mathematical modeling of real-life situations, the course gives the students the motivation to persevere through routine and non-routine problems, and as a result, develop strength and confidence in their mathematics ability towards life-long learning. In addition to the Academic level description, course topics include (but are not limited to) operations with rational and irrational expressions, factoring of rational expressions, solving systems of linear and quadratic equations, properties of higher degree equations, and operations with rational and irrational exponents. The courses may introduce topics in discrete math, elementary probability and statistics; matrices and determinants; and sequences and series. *Financial Reasoning* is a full-year CORE math class that can be taken to fulfill a student's graduation requirement. The course emphasizes the mathematical modeling of financial principles. If you are looking for an ELECTIVE course that emphasizes the knowledge and vocabulary required to make informed, independent financial decisions, consider *Personal Finance in Today's Economy* offered in the Technology/Business Department.

Essentials of Math 8 262

Academic - Grade 8

This course will focus upon student's individual needs in preparation for success in further secondary mathematics courses. Through the use of manipulatives, cooperative learning, and "real life" scenarios, this course allows students to explore manipulation of whole numbers, decimals, fractions, integers and rational numbers, solving one and two step equations, probability and geometry. Students will discover algebraic expressions, solving equations, setting up and solving proportions, and graphing equations. Based on level of completion, students will move to Essentials of Algebra or Algebra I.

Essentials of Algebra 263 - 4 Credits

Academic - Grade 9 - Prerequisite: Essentials of Math 8

This course will focus upon students' individual needs in preparation for success in further secondary mathematics. During this course students will review basic math facts, all Pre-Algebra concepts, and begin studying Algebra I topics. This course will utilize manipulatives, math labs, problem-solving techniques, lecture, and test-taking skills in mathematics. Course instruction will be focused on each student's specific improvement area as indicated by performance objectives (computation, measurement, number sense, algebra, geometry, etc.). Instruction will include data from multiple assessment formats. Based on level of completion, students will move to Essentials of Geometry, Algebra 1, or Geometry.

Essentials of Algebraic Geometry 264 - 4 Credits

Academic - Grade 10 - Prerequisite: Essentials of Algebra

This course will focus upon students' individual needs in preparation for success in further secondary mathematics courses. During this course students will review most Algebra I and Geometry concepts, and prepare for further secondary mathematics. This course will utilize manipulatives, math labs, problem-solving techniques, lecture, and test-taking skills in mathematics. Course instruction will be focused on each student's specific improvement area as indicated by performance objectives (computation, measurement, number sense, algebra, geometry, etc.). Instruction will include data from multiple assessment formats. Based on level of completion, students will move to Essential of Advanced Math, Geometry, Intermediate Algebra or Algebra II.

Essentials of Advanced Math 265 - 4 Credits

Academic - Grade 11-12 - Prerequisite: Essentials of Algebraic Geometry

This course will focus upon students' individual needs in preparation for success in further secondary mathematics courses. During this course students will continue to expand upon Algebra I concepts, Geometry concepts, and preview Algebra II concepts. This course will utilize manipulatives, math labs, problem-solving techniques, lecture, and test taking skills in mathematics. Course instruction will be focused on each student's specific improvement area as indicated by performance objectives (computation, measurement, number sense, algebra, geometry, etc.). Instruction will include data from multiple assessment formats. Based on level of completion, students will move to Intermediate Algebra, Financial Reasoning or Algebra II.

Integrated Math 1 255-4 Credits

Academic - Grade 10-12 - (For English learners only) - Depending on Placement Test, may also take Geometry

This course is limited to students in English Language Development 1 (ELD 1) who need additional skills to be prepared for Algebra 2. This course will develop standards and skills appropriate to the Grade 10 MCAS Assessment. Students will develop skills in working with

polynomials, linear equations, quadratic equations and their connections with geometry as well as practical applications and statistical basics. Based on level of mastery and language acquisition skills, students will move to either Intermediate Algebra, Geometry or Algebra 2.

### **SCIENCE**

Ms. Sarah Davis, PK-12 Director of Science, 978-567-6100 ext. 41148

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We will challenge students to investigate scientific problems and create novel solutions, and to use their scientific knowledge to take action and lead in their local and global communities.

The typical course of science study is a three-year sequence of Biology, Chemistry, and Physics. Students who enroll in Hudson High after freshman year and students with customized learning plans may take different courses or courses in a different sequence. In addition to this core coursework, students are encouraged to choose from a rich array of electives starting in Grade 9 and offered up through Grade 12. All science courses focus on the practices of experimental design, analyzing and interpreting data, modeling, constructing explanations, and arguing from evidence. In a time of ever-increasing emphasis on the sciences, the Hudson High School program is designed to grow students who are ready to think critically, problem-solve creatively, and act to improve the lives of those around them.

All students are required to pass the science MCAS to earn a diploma. HHS ninth graders typically take Biology and the Biology MCAS in the spring of 9th grade. Students who enroll in Hudson High after freshman year and students with customized learning plans may take the Physics MCAS.

Core Course Offerings (listed by the year students typically take the course)		Advanced Placement Science Elective Courses Advanced Placement Biology (10-12)	
Grade 8	Science 8 - Academic	Advanced Placement Chemistry (11/12) Advanced Placement Physics C (12)	
	Bioscience Foundations 8/9	Specialty Science Electives	
Grade 9	Essentials of Biology A/B - Academic	PLTW Principles of Biomedical Science (9/10) Academic/Honors Elective PLTW Human Body Systems (10-12) - Academic/Honor Elective PLTW Medical Interventions (11/12) - Academic/Honor	
	Biology - Academic		
	Biology - Honors		
	Bioscience Foundations 8/9	Elective PLTW Common Capstone (12) - Honors Elective	
Grade 10	Essentials of Biology A/B - Academic	Anatomy and Physiology (11/12) - Academic/Hono Elective	
	Chemistry - Academic	Marine Ecology (10-12) - Academic Elective	
	Chemistry - Honors	Forensics (11/12) - Academic Elective	
	Physics Foundations 10-12		
Grades 11/12	Essentials of Physical Science - Academic		
	Physics - Academic		
	Advanced Placement Physics I		
	Physics Foundations 10-12		

#### **CORE SCIENCE COURSES**

Science 8 584

Academic - Grade 8

This course offers an integrated study of physical, life, and earth sciences through a hands-on approach. Topics of study include reasons for seasons, heredity, and atomic interactions. Throughout the course, students will be asked to design investigations, analyze data, construct explanations, and argue from evidence. By the end of this course, students will be prepared to take the Grade 8 STE Massachusetts Comprehensive Assessment System (MCAS) test.

Bioscience Foundations 595 - 4 credits

Academic - Grades 8-9 (Lab Science) - For English learners only

Bioscience Foundations 8-9 is a general life science course which focuses on developing listening, speaking, reading and writing skills in problem-based bioscience contexts. Students develop language skills and science content understanding through hands-on investigations and small group work.

Biology 519 - 4 Credits

Honors - Grades 9-12 - (Lab Science) - Prerequisite: Teacher recommendation

Honors Biology is an accelerated introductory, inquiry-based lab course. Topics of study include biochemistry, cell structure and function, genetics, natural selection, and ecology. By the end of this course, Grade 9 students will be prepared to take the Biology Massachusetts Comprehensive Assessment System (MCAS) test.

Biology 522 - 4 Credits

Academic - Grades 9-12 (Lab Science)

Academic Biology is an introductory, inquiry-based lab course. Topics of study include biochemistry, cell structure and function, genetics, natural selection, and ecology. By the end of this course, Grade 9 students will be prepared to take the Biology Massachusetts Comprehensive Assessment System (MCAS) test.

Essentials of Biology A/B 590/591 - 4 Credits

Academic - Grade 9/10 (Lab Science)

Essentials of Biology A/B is designed for students who require small group, multi-modal instruction in the sciences. The course is cotaught with special education faculty and places special emphasis on the development of academic and literacy skills. Topics of study include biochemistry, cell structure and function, genetics, natural selection, and ecology. By the end of this course, students will be prepared to take the Biology Massachusetts Comprehensive Assessment System (MCAS) test.

Chemistry 531 - 4 Credits

Honors - Grades 10-12 (Lab Science) - Prerequisite: Teacher recommendation.

Honors Chemistry is an intensive introductory, inquiry-based lab course. Topics are covered in depth, and students are expected to independently apply algebraic strategies in chemistry contexts. Topics of study include properties of matter, the atom, trends of the periodic table, chemical bonding, reactions, and stoichiometry. Laboratory work is an essential component of the class. This course is designed to prepare students for advanced chemistry electives.

Chemistry 532 - 4 Credits

Academic - Grades 10-12 (Lab Science)

Academic Chemistry is an introductory, inquiry-based lab course. The class is designed to promote students' curiosity about the processes of the world around them. Topics of study include properties of matter, the atom, trends of the periodic table, chemical bonding, reactions, and stoichiometry. Laboratory work is an essential component.

Physics 536 - 4 Credits

Academic - Grades 11-12 (Lab Science)

Academic Physics is an introductory, inquiry-based lab course. The course focuses on forces and motion, momentum, energy, waves, and electromagnetism. Students are involved in the design, construction, and testing of devices which embody the physical principles studied

in the course. By the end of this course, students will be prepared to take the Physics Massachusetts Comprehensive Assessment System (MCAS) test.

Advanced Placement Physics 1 564 - 4 Credits

Advanced Placement - Grade 11 (Lab Science) - Prerequisite: Teacher recommendation

AP Physics 1 is a rigorous introductory physics course designed as the equivalent to a first-semester algebra-based college physics course. Students will develop a deep understanding of foundational physics principles (including kinematics, dynamics, circular and rotational motion, energetics, momentum and energy conservation, electrostatics, and DC electrical circuits) and apply those principles to dynamic physical situations. There is a strong emphasis on group discussion, inquiry-based laboratory design, critical thinking, and reasoning skills. Students in this course **can choose** to take the Advanced Placement Physics 1 Test.

Essentials of Physical Science 592 - 4 Credits

Academic - Grades 11-12 (Lab Science)

Essentials of Physical Science is a course designed for upperclassmen who require small group, multi-modal instruction in the sciences and, for those students, it is intended to complete the core science requirements needed for graduation. The course is co-taught with special education faculty and places special emphasis on the continued development of academic and literacy skills.

Physics Foundations (410E) - 4 credits

Academic - Grades 10-12 (Lab Science) - For English learners only

Physics Foundations is an introductory, inquiry-based lab course. The course focuses on forces and motion, momentum, energy, waves, and electromagnetism. Students develop language skills and science content understanding through hands-on investigations and small group work. By the end of this course, students will be prepared to take the Physics Massachusetts Comprehensive Assessment System (MCAS) test.

#### ADVANCED PLACEMENT SCIENCE COURSES

Advanced Placement Biology 556 - 4 Credits

Advanced Placement - Grades 10-12 - (Lab Science) - Prerequisites: Biology and teacher recommendation

This intensive, laboratory based course is the equivalent of a first-year college biology course. Students will explore both macroscopic and microscopic areas of biology. Topics of study include biochemistry, cellular biology, heredity, molecular genetics, evolution, and ecology. Students in this course are required to take the AP Biology test.

Advanced Placement Chemistry 533 - 4 Credits

Advanced Placement - Grades 11-12 (Lab Science) - Prerequisites: Chemistry and teacher recommendation

This fast-paced course is the equivalent of a first-year college chemistry class. It is a rigorous course, both in scope and in mathematical demands. Topics in the course include the structure of matter, kinetic theory, equilibria, thermodynamics and electrochemistry. Laboratory experiences comprise a significant portion of the course, and there will be an emphasis on chemical calculations and mathematical formulation of principles. Students in this course are required to take the AP Chemistry test.

Advanced Placement Physics 1 564 - 4 Credits (see core courses)

Advanced Placement Physics C 535 - 4 Credits

Advanced Placement - Grade 12 (Lab Science) - Prerequisite: AP Physics 1, concurrent enrollment in Honors or AP Calculus and teacher recommendation

AP Physics C is designed for students who have taken a first year physics course and are enrolled in Calculus as co-requisite. The two areas covered in depth are classical mechanics and electricity and magnetism. This rigorous course stresses both the mathematical and the practical applications of the topics being studied. Strong emphasis is placed on laboratory investigations, problem solving, and quantitative manipulations and reasoning. This course prepares students to take both the Mechanics and Electricity & Magnetism (calculus based) Advanced Placement tests.

#### SPECIALTY ELECTIVE SCIENCE COURSES

Anatomy and Physiology 520 - 4 Credits

Academic/Honors Elective - Grades 11-12 (Lab Science)

Prerequisite: Biology

This full-year course focuses on the basic anatomy and physiology of the skeletal, muscular, nervous, digestive, respiratory, cardiovascular, endocrine, immune, urinary, and reproductive systems of the human body. The course is designed for students who plan to study bioscience at the post-secondary level.

Marine Ecology - 550 - 2 Credits

Academic Elective - Grades 10-12 (Lab Science)

Prerequisite: Biology

This one-semester course examines interactions among organisms in marine ecosystems. The course starts with an introduction to saltwater organisms and their adaptations, as well as their interdependent relationships with one another. Students also study human impact on ecological processes in the world's oceans and what can be done to prevent marine extinctions.

Forensics 542 - 2 Credits

Academic Elective - Grades 11-12 - Semester (Lab Science)

Prerequisites: Biology, Chemistry, Geometry

This semester course is designed for juniors and seniors who are interested in the use of science in criminal investigation. Forensic science studies the application of scientific principles to the examination of evidence. Students will review biological and chemical concepts, learn new analysis techniques, and apply the techniques to simulated "evidence". Students will be challenged to think for themselves to support their claims with evidence. Topics include crime scene investigation, blood analysis, physical evidence, prints and impressions, and hairs and fibers.

#### PLTW BIOMEDICAL SCIENCE

In partnership with Project Lead the Way, Hudson High currently offers three project-based Biomedical Science electives. Through these courses, students develop skills, confidence, and expertise in a field that is vitally important in today's world and that touches all aspects of daily life. In each course, students develop a resume of in-demand skills. The courses grow strong collaborators and problem solvers, and students develop skill with cutting-edge lab techniques and tools. In every course, students step into the roles of biomedical professionals and learn about a wide variety of biomedical career options in the real world. Regardless of students' future career plans, the project-based experiences in the Biomedical program are designed to prepare students for the collaborative problem-solving they can expect in any future college and work environment.

Principles of Biomedical Science (PLTW) 565/565A - 4 Credits

Academic/Honors Elective - Grades 9-10 (Lab Science)

This full-year course provides an introduction to biomedical science through hands-on projects and problems. Students investigate concepts of biology and medicine as they explore health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. They conduct a forensic investigation into a suspicious death, learn how to run common medical diagnostics, and simulate medical care in a natural disaster area. Students practice problem solving with structured activities and progress to open-ended projects and problems that require them to develop planning, documentation, communication, and other professional skills. Students who take PLTW coursework may be eligible to earn college credit.

Human Body Systems (PLTW) 566/566A - 4 Credits

Academic/Honors Elective - Grades 10-12 (Lab Science)

Prerequisite: Biology (Students in grade 10 must have taken PLTW Principles of Biomedical Science)

In this full-year course, students explore the interactions of body systems as they step into the roles of varied biomedical professionals. They investigate the structures and functions of the human body, design experiments and conduct dissections, use data acquisition software to monitor body function, and build organs and tissues on a skeletal manikin. They tackle authentic medical cases, and develop plans to treat illness and injury. Students who take PLTW coursework may be eligible to earn college credit. *The curriculum for this course includes a Civic Action Project. Successful completion of this project fulfills the CAP graduation requirement.* 

Medical Interventions (PLTW) 567/567A - 4 Credits

Academic/Honors Elective - Grades 11/12 (Lab Science)

Prerequisite: PLTW Human Body Systems, Anatomy & Physiology, or AP Biology

In this full-year course, students follow the life of a fictitious family as they investigate how to prevent, diagnose, and treat disease. Students explore how to detect and fight infection; screen and evaluate the code in human DNA; evaluate cancer treatment options; and prevail when the organs of the body begin to fail. Through real-world cases, students are exposed to a range of interventions related to immunology, surgery, genetics, pharmacology, medical devices, and diagnostics. Students who take PLTW coursework may be eligible to earn college credit.

PLTW Common Capstone [Formerly: Engineering Development and Design (EDD - PLTW)] 639H - 4 Credits (offered alternate years; next offered 2025-2026)

Honors - Grades 11-12 - Recommended: Students should have completed the PLTW Engineering or Bio Medical courses with a grade of C or better

In this capstone course, students who have participated in the PLTW Engineering and/or Bio Medical track completing PLTW Principles of Biomedical Science, PLTW Human Body Systems, and PLTW Medical Interventions, work in teams to design and develop an original solution to a valid open-ended technical problem by applying the engineering design process. Students perform research to choose, validate, and justify a technical problem. After carefully defining the problem, teams design, build, and test their solutions while working closely with industry professionals who provide mentoring opportunities. Finally, student teams present and defend their original solution to an outside panel of engineers. The specific solution identified may align as a Civic Action Project. Successful completion of an aligned project fulfills the CAP graduation requirement.

# **ENGINEERING**

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Hudson High School offers several courses focusing on engineering. These courses are largely hands-on and require students to solve real-life problems using the skills learned in class. Engineering courses push students to be strong collaborators and critical thinkers. The skills mastered in engineering courses will be beneficial to students beyond high school regardless of the career path they choose to take.

Hudson High School is proud to offer five engineering courses in partnership with Project Lead the Way (PLTW) and Worcester Polytechnic Institute (WPI). These courses are designated below as "PLTW." Students who take and pass the PLTW courses for grades 9-12 may be eligible to earn college credit while in high school.

It is recommended that students entering the 8th grade who are interested in taking courses under the Engineering area begin with either the Robotic with LEGO Mindstorms course and/or Exploring Flight & Space and the Environment course. Students in grades 9 through 12 who are interested in taking courses under the Engineering area should begin with Robotics with LEGO Mindstorms, Introduction to Engineering Design, and/or 3D Modeling and Design.

#### **Engineering Electives**

Robotics with LEGO Mindstorms - Academic Elective

3D Modeling and Design - Academic Elective

#### Project Lead the Way Engineering Courses

Exploring Flight & Space and the Environment - Academic Elective

- \*Introduction to Engineering Design Academic Elective
- \*Principles of Engineering Academic/Honors Elective (offered alternate years; next offered in 2025-2026)
- \*Digital Electronics Academic/Honors Elective (offered alternate years: offered 2024-2025)
- \*PLTW Common Capstone [Formerly: Engineering Development and Design] (Capstone Course) Honors Elective (offered alternate years: next offered 2025-2026)
- \*Students who receive a score of 85 or better in the course and achieve a minimum score on the final exam are eligible for college credit through Rochester Institute of Technology.

Project Lead the Way (PLTW) courses are accessible to a wide range of learners and should be considered by students with a variety of college and career interests. These courses may be of particular interest to students seeking the following post-secondary options:

Students Seeking an Engineering Degree may consider two possible sequences of PLTW courses throughout their HHS career.

9th Grade	10th Grade	11th Grade	12th Grade
Introduction to Engineering Design	Principles of Engineering	Digital Electronics	Honors PLTW Common Capstone
Introduction to Engineering Design	Digital Electronics	Principles of Engineering Honors PLTW Common Capstone	Honors PLTW Common Capstone

Students Seeking a Technical Program/Degree may consider the following sequence of PLTW courses throughout their HHS career.

9th Grade	10th Grade	11th Grade	12th Grade
Introduction to Engineering Design	- C	8 1 8	Honors PLTW Common Capstone

#### Other Elective courses that support the creative, collaborative, and critical thinking skills fostered by the Engineering Program:

- Technology Electives: Introduction to Computer Science I (9-12), AP Computer Science (11-12), Introduction to Marketing (9-12), Honors Accounting I (10-12), Business Economics (10-12), or Business Management (11-12)
- Visual Arts: Art I

Robotics with LEGO Mindstorms 870A - 2 Credits

Academic - Grades 8-9 - Semester

This is a hands-on problem solving course designed to introduce students to programming, logical thinking, teamwork and project-based learning. Students will build working models using Lego Mindstorms EV3 building sets and software. Design challenges are open-ended with problems, background information, and design criteria. Each project has multiple potential solutions to challenge students' creativity. Helpful skills for students to have prior to course include file management basics, general understanding of Windows based programs.

3D Modeling and Design 642 - 2 Credits

Academic - Grades 9-12 - Semester

In this course, students will be introduced to the CAD (Computer Aided Design Software). For this course we are using Autodesk Fusion 360 modeling software. The first half of the course covers the basics of 3D modeling with Creo. Students will complete teacher guided projects and have the opportunity to complete independent projects during this model to show overall competency. The second module of the course is focused on projects that apply what the students have learned and introduces 3D printing to them. Students will have the opportunity to complete several projects that 3D print their creations.

Exploring Flight & Space and the Environment (GTT - PLTW) 588

Academic - Grade 8 - Semester

In this course, students will have an opportunity to explore two topics through the lens of engineers. Grade 8 PLTW Engineering will combine two PLTW Gateway to Technology units and is a continuation of the QMS engineering courses. In Energy & the Environment students are challenged to think big and look towards the future as they explore sustainable solutions to our energy needs and investigate the impact of energy on our lives and the world. They design and model alternative energy sources and evaluate options for reducing energy consumption. Through the Flight and Space unit, students delve into the history of flight and space, discover the science behind aeronautics, and explore traveling and living in space. Students are challenged to use their knowledge to design, build, and test an airfoil.

Introduction to Engineering Design (IED - PLTW) 635A/635AH - 4 Credits

Academic/Honors - Grades 9-12

This course teaches problem-solving skills using a design development process. Models of product solutions are created, analyzed and communicated using solid modeling computer design software. In this course students will learn basic engineering terminology and practices in addition to learning the basics of design. Students will learn to use Inventor (a 3D solid modeling program) to create their designs and working drawings. Students will learn how they skills learned in geometry and algebra are applied to basic engineering and design principles. Students will create several virtual and hands-on projects throughout the course. Projects include designing and building a puzzle cube and automata toy, making a virtual bathroom vanity, and reverse engineering a toy car.

Principles of Engineering (POE - PLTW) 636/636H - 4 Credits

Academic/Honors - Grades 9-12 (offered alternate years; next offered in 2025-2026) This course provides an overview of engineering and engineering technology. Students will develop problem-solving skills by tackling real-world engineering problems. This course provides a hands-on approach to science, math, and technology applications. Through theory and practical hands-on experience, students will become familiar with the multifaceted career of engineering. This course will explore various topics including Design Process, Fluid

Power, Electronics, Robotics, Mechanical Systems, Materials Testing, Thermo-dynamics, and Engineering for Quality and Reliability. This course is the second core course offered in the Project Lead the Way curriculum.

Digital Electronics (DE- PLTW) 638/638H - 4 Credits - (offered alternate years; offered 2024-2025) Academic/Honors - Grades 10-12

Digital electronics is the foundation of all modern electronic devices such as mobile phones, MP3 players, laptop computers, digital cameras and high-definition televisions. Students are introduced to the process of combinational and sequential logic design, engineering standards and technical documentation. Students will have the opportunity to create physical and virtual circuits as well as work with microcontrollers during the course.

PLTW Common Capstone [Formerly: Engineering Development and Design (EDD - PLTW)] 639H - 4 Credits (offered alternate years; next offered in 2025-2026)

Honors - Grades 11-12 - Recommended: Students should have completed the PLTW Engineering or Bio Medical courses with a grade of C or better

In this capstone course, students who have participated in the PLTW Engineering track completing one of the following: Introduction to Engineering, Principles of Engineering, or Digital Electronics and/or Bio Medical track work in teams to design and develop an original solution to a valid open-ended technical problem by applying the engineering design process. Students perform research to choose, validate, and justify a technical problem. After carefully defining the problem, teams design, build, and test their solutions while working closely with industry professionals who provide mentoring opportunities. Finally, student teams present and defend their original solution to an outside panel of engineers. The specific solution identified may align as a Civic Action Project. Successful completion of an aligned project fulfills the CAP graduation requirement.

## TECHNOLOGY/BUSINESS

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### **Course Offerings:**

#### **Business/Finance Electives**

Accounting - Honors Elective (offered alternate years; offered 2024-2025)

Business Management - Academic Elective

Introduction to Marketing - Academic Elective

Personal Finance in Today's Economy - Academic Elective

#### **Graphic Arts and Design Electives**

Digital Imaging and Design - Academic Elective

Computer Animation - Academic Elective

Graphic Design I - Academic Elective

Graphic Design II – Academic Elective

Advanced Studies in Graphic Design - Academic Elective

#### Programming Electives

Computer Programming I - Academic Elective

Computer Programming - Honors Elective

Video Game Design and Development I - Academic Elective

Video Game Design and Development II - Academic

Elective

Web Design - Academic Elective

AP Computer Science - Academic Elective (offered alternate

years; offered 2024-2025)

### **Video Production Electives**

Media I - Academic Elective

Media II - Academic Elective

Broadcast Production - Academic Elective

Advanced Studies in Broadcast Production - Academic

Elective

### **Business/Finance Electives**

It is recommended that students consider taking Digital Imaging and Design in grade 8 and then Personal Finance in Today's Economy in grade 9 before taking other electives in the Business area.

Accounting 614 - 2 Credits

Honors - Grades 10-12 - Semester – (offered alternate years; offered 2024-2025)

In today's changing business world, accounting is the "language" of business. This is an introductory course in the principles of accounting for students interested in pursuing a career in business. Problems will be completed both manually and on the computer. Students will be introduced to the accounting cycle for businesses and will be able to analyze financial transactions. Topics covered in the course will include general and specialized journals, general and subsidiary ledgers, financial statements, sales and accounts receivables, purchases and accounts payables, payroll and taxes, profit analysis, and financial ratios.

Business Management 637 - 2 Credits

Academic - Grades 10-12 - Semester

The central focus of the course is to build a solid foundation of established business principles and practices that form the groundwork for all business operations. Students will examine the three main business structures (proprietorship, partnership and corporation) as well as small business management, e-commerce, social responsibility and business ethics, financial operations, consumer decisions, and entrepreneurship.

Introduction to Marketing 643 - 2 Credits

Academic - Grades 9-12 - Semester

This course is an examination of the overall marketing system from the marketing decision-maker's viewpoint. The course emphasizes product, price, promotion, and distribution as well as the planning, research, and organization required to implement marketing concepts. Also, we study the managerial, economic, social, and legal implications of marketing activities, policies, and strategies. Classes will examine various real-life marketing strategies for companies through case studies, videos, advertisements and news articles.

Personal Finance in Today's Economy 670A - 2 Credits

Academic - Grades 9-12 - Semester

This course will inform students how individual choices and economic factors directly influence personal and occupational goals. Real world topics covered will include income, money management, spending and credit, as well as saving and investing. Students will design personal budgets, utilize checking and saving accounts, gain knowledge in finance, debt and credit management, and evaluate and understand insurance and taxes. This course will provide a foundational understanding for making informed personal financial decisions leading to financial independence.

### **Programming Electives**

It is recommended that students interested in this pathway begin by taking Digital Imaging and Design, Introduction to Computer Science, or Computer Animation.

Video Game Design and Development I 681 - 2 Credits

Academic - Grades 8-12 - Semester

Do you like to play video games? Ever wonder how they are made? This course will provide students with the opportunity to learn all of the creative, business and technological aspects required to design and develop new video games. Students will plan, program and enhance their very own video games for the PC. Take-away skills include concept development and game art with the Adobe CS.

Video Game Design and Development II 683 - 2 Credits

Academic - Grades 10-12 - Semester

This course will introduce students to new techniques and methods to expand upon the skills learned in Video Game Design and Development I. Students will learn about the business of side video game development by communicating ideas in person and enhancing organization skills through game development documents and storyboard development. The class will be introduced development in a group dynamic, collectively brainstorming concepts, collaborating, developing and distribute a platform game for the pc. Development software includes GameMaker, the Adobe Creative Suite, Audacity Audio Editor and an introduction to Unity.

Web Design 882 - 2 Credits

Academic - Grades 8-12 - Semester

In this project-based course, students will explore the fundamentals of web page design using HTML, CSS and JavaScript. Students compare different development approaches and work with HTML syntax using NotePad++ text editor. Foundational topics include HTML, CSS and JS Syntax, page structure, text formatting, local and external hyperlinks, lists, tables, elements, attributes, properties and values. Finally, students will develop custom assets using the Adobe Creative Suite.

Honors Computer Programming 644H - 2 credits

Academic - Grades 10-12 - Semester

This programming course introduces students to the fundamentals of computer science using Python within the PyCharm integrated development environment (IDE) and GML, a proprietary, C based language used for Video Game Development. Students will apply these skills in the areas of business, data simulations/assessment and game development. Finally, students will make career connections through research, virtual one-to-one and class Q&A's with career professionals. The experience is designed to prepare students for the *programming* aspects of AP Computer Science Principles and follow PLTWs model for career connections.

Computer Programming I 644 - 2 credits

Academic - Grades 8-12 - Semester

This introductory programming course introduces students to the fundamentals of computer science using JavaScript and Python. Students will experience the common aspects of each Integrated Development Environment (IDE), the supports, programing fundamentals and the unique syntax of each language. Finally, students will apply these skills in the areas of business, Web Dev, Circuitry and Robotics.

AP Computer Science Principles 616 - 4 credits

Academic – Grades 11-12 – (offered alternate years; offered in 2024-2025)

AP Computer Science Principles introduces students to the breadth of the field of computer science. In this course, students will learn to design and evaluate solutions and to apply computer science to solve problems through the development of algorithms and programs. They will incorporate abstraction into programs and use data to discover new knowledge. Students will also explain how computing innovations and computing systems, including the Internet, work, explore their potential impacts, and contribute to a computing culture that is collaborative and ethical. Note: It is recommended that students in the AP Computer Science Principles course have successfully completed a first-year high school algebra course with a strong foundation of basic linear functions, composition of functions, and problem-solving strategies that require multiple approaches and collaborative efforts.

#### Graphic Arts and Design Electives

It is recommended that students begin with Computer Animation and/ or Digital Imaging & Design before Graphic Design I or Graphic Design II. Graphic Design I and II can be taken interchangeably. One of the Graphic Design courses must be taken before enrolling in Advanced Graphic Design Studies.

Digital Imaging and Design 680 - 2 Credits

Academic - Grades 8-9 - Semester

Learn the foundations of digital graphics and design and create art like a pro. In this course, students will develop the skills necessary for manipulating and producing images using the computer. Emphasis is placed on a basic understanding of the computer as a creative tool including design and composition, images for the web, screen and print resolution and digital photography. Students will use the computer to create original designs, as well as to combine existing images and photographs. Creative problem solving, personal expression and competence will be gained. Projects will include working with various applications in the Adobe Creative Cloud Suite.

Computer Animation 238 - 2 Credits

Academic - Grades 8-9 - Semester

Learn the basics of computer animation and animated storytelling. Students will be introduced to the principles of animation through simple drawing exercises, animated shorts, and creating their own animations. They will also explore the history of moving images, the illusion of motion and the 12 principles of animation. Students will develop the important skills of storytelling, computer skills, and "pitching" an idea. The class will discuss the role of empathy in storytelling and analyze visual images. We will create optical toys, storyboards, characters and background design, and gifs using Pivot, Adobe Photoshop, Adobe Illustrator, and Adobe Animate.

Graphic Design I 809 - 2 Credits

Academic - Grades 9-12 – Semester

Graphic Design I is a course in which students will express themselves visually and be able to showcase their creativity. Students will create original digital designs, explore DSLR cameras, and acquire skills for photo editing. Emphasis is placed on a basic understanding of the computer as a creative tool and the elements and principles of design. Creative problem solving, personal expression and competence will be gained through the use of the Adobe Suite, specifically Adobe Photoshop and Lightroom.

Graphic Design II 649- 2 Credits

Academic - Grades 9-12 – Semester

Graphic Design II is a course in which students will express themselves visually and be able to showcase their creativity. Students will create original digital illustrations and motion graphics. Emphasis is placed on a basic understanding of the elements and principles of design, the creation process, and layout composition. Creative problem solving, personal expression and competence will be gained through the use of the Adobe Creative Cloud suite, specifically Adobe Illustrator and After Effects.

Advanced Studies in Graphic Design 648 - 2 Credits

Academic - Grades 10-12 - Semester - Prerequisite: Graphic Design I or Graphic Design II

Note: Course may be taken over consecutive semesters.

Advanced Studies in Graphic Design is a continuation of the Graphic Design courses offered. In this course, students will choose one area for concentration in which the student will express themselves visually and be able to showcase their creativity. Finished comprehensive

projects will be created on the computer to a professional quality suitable for inclusion in a student's portfolio and portfolio presentation at the end of the course. Students must have a strong knowledge of programs in the Adobe Creative Cloud Suite. This course may be taken over consecutive semesters. Students will assume increased rigor and work with real clients to create graphic designs.

#### Video Production Electives

It is recommended that students interested in this pathway begin with Digital Imaging and Design or Media I.

Media I 612 - 2 Credits

Academic - Grades 8-10 - Semester

Students will have the ability to analyze, evaluate and produce media in a variety of forms. Through analyzing popular videos and commercials, students will learn what goes in to making the media they consume and use that knowledge to communicate a message and persuade an audience. Designing with storyboards, writing scripts, videotaping and editing their own productions in Final Cut Pro software are all inclusive in this course. Students will also learn to read the visual language of media used in a variety of formats including commercials and movies. All Media students will have the opportunity to participate in two community-service videotaping events for broadcast on HUD-TV. Students will also finish the course with a digital media portfolio for college applications, resumes, and internships.

Media II 613 - 2 Credits

Academic - Grades 9-12 - Semester

Students in Media II will take their critical thinking and video production skills to the next level focusing on media content. Students will explore media literacy and have opportunity to express their ideas through a variety of media including podcasting, sports broadcasting, music videos, public service announcements and film documentaries. Students will learn story structure, writing for video, camera composition, sound editing, and lighting design. Students will study the work of a variety of directors and cinematographers to advance their production techniques. All media II students will have opportunity to get hands-on experience in our multi-camera television studio. Students will finish the course with a digital media portfolio for college applications, resumes, and internships.

Broadcast Production 678 - 2 Credits Academic - Grades 9-12 - Semester Prerequisite: Media I or Media II

Students will learn the basics of Broadcast Production including journalistic analysis, documentary production, and student focused learning that builds critical thinking, problem solving, and communication skills. Students will learn the skills of interviewing, writing for a voice-over, and performing a stand-up for a news package. Students will produce, write script, videotape, and edit a weekly school news broadcast based on the school and community announcements for broadcast on HUD-TV. Each student will have the opportunity to assume the real life roles of producer, director, anchor, reporter, camera operator, video editor, and graphic designer. Successful students in this class will develop skills in the following areas: story research, storytelling, script writing, editing and teamwork. At the end of the course, each student will produce a short documentary. Students will finish the course with a digital media portfolio for college applications, resumes, and internships. Additionally, the class works collaboratively with Big Red Journalism. Together, the classes produce video content for both HUD-TV and The Big Red. Students are encouraged to take one or both of these courses, as they teach complementary media production skills.

Advanced Studies in Broadcast Production 684 - 2 credits

Academic - Grades 10-12 - Semester - Prerequisite: Broadcast Production

Note: This course may be taken over consecutive semesters.

Students will enhance their abilities in script writing, videography and editing to create professional videos. Student will study advanced writing techniques and format. Students will gain an understanding of the differences between short films, feature films, and documentary films. Students will learn directing, reverse directing, advanced cinematography composition, cinematic lighting and sound design. Students will have the opportunity to produce a short film or documentary. Students will have a managerial role in producing HUD-TV's Daily Live Morning Announcement Program, "Friday Morning Lights." Student roles will include: Station Manager, Online Content Manager, News Director, and Assignment Editor to produce their own television broadcast. Students will finish the course with a digital media portfolio for college applications, resumes and internships. This course may be taken over consecutive semesters.

## **ACADEMIC OPPORTUNITIES**

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#### Compass Program - Grades 9-11

The Compass Program offers students a small structured learning environment with academic, social, emotional and behavioral support. Teachers may differentiate instruction within the classroom, adapting Massachusetts Frameworks as necessary to allow students to progress. The program consists of three classes: two content area instructors for English, Math, and a third Support Teacher for Academic Resources. In addition, students focus on organizational and executive functioning skills to assist in developing growth of areas outside core content.

### Hudson Community Work Study - Grades 11/12

This variable credit junior/senior work-study takes place outside of the school setting. Students will work with the Career Counselor according to career interests. Students will be evaluated by their on-site mentor using the official "Massachusetts Work-Based Learning Plan" from the Department of Education. Participants will complete daily work journals and must follow all of the rules and regulations of the program. This work-study experience is for students who hope to enter the workforce immediately upon graduation from Hudson High School. It will allow students to explore areas of career interest while working in the local community with a local mentor. Prior to enrolling in Hudson Community Work Study, students and parents/guardians must meet with the career counselor to review the general eligibility requirements and responsibilities and sign a work-study contract. Both the Principal and Assistant Principal must approve all students entering this program.

#### Hudson High School Dual Enrollment Program - up to 16 HHS credits and up to 12 college credits

Hudson High School has partnered with Quinsigamond Community College (QCC) to offer online college credit courses to juniors and seniors. Students can take one 3-credit class each semester, with the availability to earn up to 16 credits. This is a dual-enrollment program, which means students earn AP credit at HHS and college credit through QCC. Student schedules will reflect a designated block where they can access the course online during the school day, in addition, to anytime at home. Students in grades 10 and 11 will be surveyed for college course taking interest to plan for course work to be offered the following year.

#### Academic Seminar - Grades 8-12 - Semester

Academic Seminar (AS) assists students in developing the academic skills needed to for success in content area classes and for college and career readiness. Students are expected to build independence and motivation as learners by setting and tracking academic goals and working diligently both in and out of class. Students document and reflect on their learning by tracking their academic progress, writing regular reflections, and maintaining ongoing communication with the instructor. Note: Course may be taken over consecutive semesters.

#### VHS Learning - Full Year / Semester

Hudson High School has continued to partner with VHS Learning, formerly known as Virtual High School (VHS), a nonprofit that provides world-class online programs to students and schools everywhere, since its inception in 1996. The VHS Learning program unites teachers and students from a variety of social, economic, and geographic backgrounds to study and collaborate with one another in a virtual learning environment. It has a wide variety of offerings including Advanced Placement courses and electives that span every discipline. In addition to accessing courses outside the HHS POS, VHS Learning provides the opportunity for students to hone their online collaboration skills through weekly group discussions, interactive lessons, and group projects. Students can access their course anywhere they have internet access and are not required to log in at a certain time each day. Once enrolled, students will be scheduled to the Library to take their VHS Learning course.

For more information or to view the VHS Learning course catalog, visit the VHS Learning website at <u>vhslearning.org</u>. Participation and course selection for VHS Learning must be approved by students' school counselors.

# **WORLD LANGUAGE**

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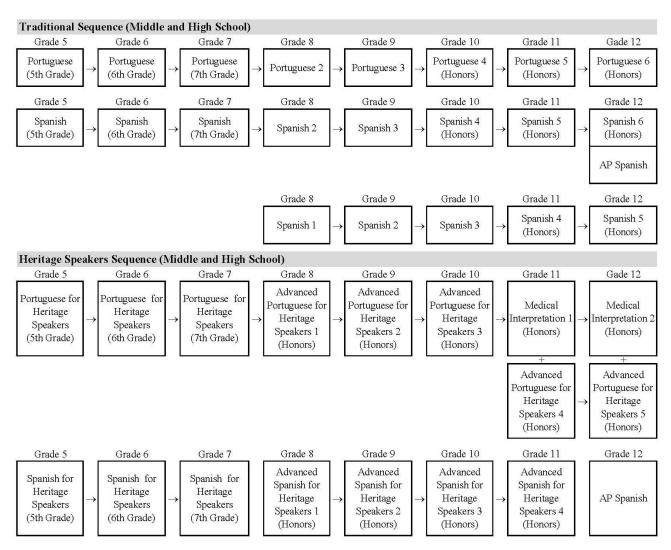
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There are many reasons why learning a new language is a valuable professional, academic and personal asset. In an increasingly interconnected world, greater interaction between people of different nations and cultures ensures a growing demand for multilingual professionals. Also, the process of learning a new language improves students' listening, analytical and organizational skills while providing children with a better understanding of their own native language. In fact, research shows that students whose program of studies includes three or more years of World Language are more likely to achieve better grades in college and less likely to drop out. Finally, students learning a new language will gain a deeper understanding and respect for other cultures, societies and traditions while acquiring a more educated perspective on the US position and role in the world.

In the World Language Department, we closely follow ACTFL's orientations regarding curriculum design, instruction and assessment. Some of our most important guiding documents are the <a href="NCSSFL-ACTFL Can-Do Statements">NCSSFL-ACTFL Can-Do Statements</a> and the <a href="World-Readiness Standards for Learning Languages">World-Readiness Standards for Learning Languages</a>. With the purpose of assessing how students function in the language in a "real-life" situation, Midterm and Final Exams in the World Language Department consist of conversations in a variety of contexts about a variety of topics. The grade awarded for these exams reports if the student exceeded, met, almost met or did not meet the target of proficiency for the course.

Following ACTFL's guidelines, World Language classes are conducted primarily in the target language.

World Language course progression:



Spanish 1 414 - 4 Credits

Academic - Grades 8-12

The proficiency target for this class is Novice High

This is a course for students who are beginning to learn Spanish. Students are introduced to the cultures of the Spanish speaking communities as they develop the skills to communicate about themselves and the world around them using simple sentences, phrases and expressions. They expand their communicative and cultural competence in this class by engaging in novice-level interpretive, interpersonal, and presentational tasks. Topics of study include an introductory unit about language and routines of the Spanish classroom, schools around the world, friends and family, food and what to wear. Upon successful completion of this course, students will take Spanish 2.

Applied Spanish 1 417 - 4 Credits

Academic - Grades 9-12 - Pre-requisite: Recommendation by teacher and/or counselor, and department approval.

The proficiency target for this class is Novice Mid

Applied Spanish is a two-year sequence that aims at introducing students to the Spanish language and provide them with basic skills to communicate in real-life situations. In this course, students develop Novice-level skills to communicate about themselves and the world around them by using simple sentences, phrases and expressions. They develop their communicative and cultural competence in this class by engaging in novice-level interpretive, interpersonal, and presentational tasks. Topics of study include an introductory unit about language and routines of the Spanish classroom, the Amazon Forest, famous people from Spanish speaking communities, and the ideal vacation. This course is not a pathway to Spanish 2, even though some students may be recommended to continue studying Spanish at higher levels.

Applied Spanish 2 418 - 4 Credits

Academic - Grades 8-12 - Prerequisite: Essentials of Spanish 1

The proficiency target for this class is Novice Mid/High

Applied Spanish is a two-year sequence that aims at introducing students to the Spanish language and provide them with basic skills to communicate in real-life situations. In this course, students develop Novice-level skills to communicate about themselves and the world around them by using simple sentences, phrases and expressions. They develop their communicative and cultural competence in this class by engaging in novice-level interpretive, interpersonal, and presentational tasks. Topics of study include schools around the world, friends and family, food and what to wear. This course is not a pathway to Spanish 2, even though some students may be recommended to continue studying Spanish at higher levels.

Spanish 2 405 - 4 Credits

Academic - Grades 8-12 - Prerequisite: Three years of Spanish at the Middle School, or Spanish 1, Essential of Spanish 2 and teacher recommendation

The proficiency target for this class is Intermediate Low

In this course, students interact with a variety of fictional and informational sources produced by native speakers to native speakers. Students communicate basic personal information, preferences and immediate needs in Spanish. Students ask questions and carry on conversations using simple questions. Topics of study include identity, daily routines, life in community and challenges and possibilities of life in the future.

Spanish 3 434 - 4 Credits

Academic - Grades 9-12 - Prerequisite: Spanish 2

The proficiency target for this class is Intermediate Mid

In Spanish 3, students continue to develop their communicative competence by interacting orally and in writing with each other, understanding oral and written messages, and making oral and written presentations in Spanish. They communicate on a variety of topics, using more complex structures. They comprehend the main ideas of the authentic materials that they listen to and read, and are able to identify significant details when the topics are familiar. Students exchange information about a diversity of topics. Spanish 3 curriculum focuses on topics of cultural interest such as the history of foods and their importance in Spanish-speaking cultures, the importance of sports, music and dance for the Spanish speaking cultures, and travelling in the Spanish-speaking world.

Spanish 4 453 - 4 Credits

Honors - Grades 9-12 - Prerequisite: Spanish 3

The proficiency target for this class is Intermediate Mid

Students at this level will explore Latin American and Spanish culture through the use of media and other sources. At this level students are able to handle successfully a variety of communicative tasks in straightforward social situations. Students understand the main ideas and identify important details of texts written by native speakers for native speakers that they read, hear or view. Students can write more extensively about familiar topics. Spanish 4 curriculum focus on the topics of life at school, work, environmentally friendly behaviors and travelling through natural parks.

Spanish 5 454 - 4 Credits

Honors - Grades 10-12 - Prerequisite: Spanish 4

The proficiency target for this class is Intermediate Mid

At this level of language proficiency students develop skills to express ideas while discussing literature, history and current events. They communicate using more fluid sentence-length and paragraph-length messages. Students understand the main ideas, identify important details, and infer information of the authentic materials they read, hear or view. Students' communicative and cultural competence is developed as they engage in intermediate-high level interpretive, interpersonal and presentational tasks. Spanish 5 curriculum focuses on History, Art and Literature topics, such as innovation in the Aztec and Inca civilization; inventions and inventors; innovative aspects of Picasso's work; and innovation in the literary work El Lazarillo de Tormes.

Spanish for College and Career (Spanish 6) 456 - 4 Credits

Honors - Grades 10-12 - Prerequisite: Spanish 5

The proficiency target for this class is Intermediate High

Students taking this course will be presented with tasks that they would face if they were living, studying, or working in a Spanish speaking country. Students will use their language skills to read authentic texts, listen to authentic sources, watch authentic videos, engage in everyday life conversations with friends, role-play complicated situations they may face when living and working abroad, share stories about personal experiences and share their opinions and points of view.

Advanced Placement Spanish Language 975 - 4 Credits

Advanced Placement - Grades 10-12 - Prerequisite: Spanish 5

The proficiency target for this class is Intermediate High

Students electing to take this course will be required to take the Advanced Placement Spanish Language Test. Students participate in an advanced placement program that is part of a national program of college-level courses and exams for secondary school students. This course is intended to provide a challenge and opportunity for dedicated students to work with more depth and independence than they do in most high school courses. Advanced interpretive, interpersonal and presentational skills are required and enhanced. Students are invited to participate in this course based on the recommendations of Spanish teachers and previous achievement levels in Spanish courses or tests. AP Spanish curriculum focuses on the topics of Global Challenges, Science and Technology, Contemporary Life, Families and Communities, and Beauty and Aesthetics.

Advanced Spanish for Heritage Speakers 1 462 - 4 Credits

Honors - Grade 8 - Full Year - Prerequisite: Speaking proficiency level of Intermediate Mid

This course aims to support heritage speakers of Spanish as they continue to develop literacy skills in the interpretive, interpersonal and presentational modes of communication. Students will focus on using oral language in formal contexts, understanding the author's craft, point of view and bias of level appropriate texts, and creating sophisticated writing. Students will use their language skills to expand their understanding of the literature, history and cultures of the Spanish-speaking world.

Advanced Spanish for Heritage Speakers 2 463 - 4 Credits

Honors - Grade 9 - Full Year - Prerequisite: Advanced Spanish for Heritage Speakers 1

This course aims to support heritage speakers of Spanish as they continue to develop literacy skills in the interpretive, interpersonal and presentational modes of communication. Students will focus on using oral language in formal contexts, engaging in the literary analysis of complex texts, and creating sophisticated writing. Students will use their language skills to expand their understanding of the literature, history and cultures of the Spanish-speaking world.

Advanced Spanish for Heritage Speakers 3 468 - 4 Credits

Honors- Grade 10 - Full Year - Prerequisite: Advanced Spanish for Heritage Speakers 2

This course aims to support heritage speakers of Spanish as they continue to develop literacy skills in the interpretive, interpersonal and presentational modes of communication. Students will focus on using oral language in formal contexts, engaging in the literary analysis of complex texts, and creating sophisticated writing. Students will use their language skills to expand their understanding of the literature, history and cultures of the Spanish-speaking world.

Advanced Spanish for Heritage Speakers 4 469- 4 Credits

Honors- Grade 11 - Full Year - Prerequisite: Advanced Spanish for Heritage Speakers 3

This course aims to support heritage speakers of Spanish as they continue to develop literacy skills in the interpretive, interpersonal and presentational modes of communication and become college and career ready in Spanish. Students will focus on using oral language in formal contexts, interpreting complex texts and creating more sophisticated writing. Students will use their language skills to expand their understanding of the literature, history and cultures of the Spanish-speaking world.

Portuguese 2 408 - 4 Credits

Academic - Grades 8-12 - Prerequisite: Three years of Portuguese at the Middle School

The proficiency target for this class is Intermediate Low

In this course students interact with a variety of informational sources produced by native speakers to native speakers. Students communicate basic personal information, preferences and immediate needs in Portuguese. Students ask questions and carry on conversations using simple questions. Topics of study include identity, daily routines, life in community and challenges and possibilities of life in the future.

Portuguese 3 437 - 4 Credits

Academic - Grades 9-12 - Prerequisite: Portuguese 2

The proficiency target for this class is Intermediate Mid

In Portuguese 3, students continue to develop their communicative competence by interacting orally and in writing with each other, understanding oral and written messages, and making oral and written presentations in Portuguese. They communicate on a variety of topics, using more complex structures. They comprehend the main ideas of the authentic materials that they listen to and read, and are able to identify significant details when the topics are familiar. Students exchange information about a variety of topics. Portuguese 3 curriculum focuses on topics of cultural interest such as the history of foods and their importance in Portuguese-speaking cultures, the importance of sports, music and dance for the Portuguese-speaking cultures, and travelling in the Portuguese-speaking world.

Portuguese 4 451 - 4 Credits

Honors - Grades 9-12 - Prerequisite: Portuguese 3

For the school year of 2024-25, the proficiency target for this class is Intermediate Mid

Students at this level will explore Portuguese-speaking culture through the use of media and other sources. At this level students are able to handle successfully a variety of communicative tasks in straightforward social situations. Students understand the main ideas and identify important details of texts written by native speakers for native speakers that they read, hear or view. Students can write more extensively about familiar topics. Portuguese 4 curriculum focus on the topics of life at school, work, environmentally friendly behaviors and travelling through natural parks.

Portuguese 5 457 - 4 Credits

Honors - Grades 10-12 - Prerequisite: Portuguese 4

For the school year of 2024-25, the proficiency target for this class is Intermediate Mid

At this level of language proficiency students develop skills to express ideas while discussing literature, history and current events. They communicate using more fluid sentence- length and paragraph-length messages. Students understand the main ideas, identify important details, and infer information of the authentic materials they read, hear or view. Students' communicative and cultural competence is developed as they engage in advanced level interpretive, interpersonal and presentational tasks. Portuguese 5 curriculum focuses on topics from Social Sciences and Art, such as gender roles and the Suffragist Movement; inventions and inventors; innovative aspects of Portuguese and Brazilian art in the twentieth and twenty-first centuries; and the Portuguese Democratic Revolution of 1974.

Portuguese for College and Career (Portuguese 6) 460 - 4 Credits

Honors - Grades 10-12 - Prerequisite: Portuguese 5

For the school year of 2024-25, the proficiency target for this class is Intermediate High

Students taking this course will be presented with tasks that they would face if they were living, studying, or working in a Portuguese-speaking country. Students will use their language skills to read authentic texts, listen to authentic sources, watch authentic videos, engage in everyday life conversations with friends, role-play complicated situations they may face when living and working abroad, share stories about personal experiences and share their opinions and points of view.

Advanced Portuguese for Heritage Speakers 1 461 - 4 Credits

Honors - Grade 8 - Full Year - Prerequisite: Speaking proficiency level of Intermediate Mid

This course aims to support heritage speakers of Portuguese as they continue to develop literacy skills in the interpretive, interpersonal and presentational modes of communication. Students will focus on using oral language in formal contexts, understanding the author's craft, point of view and bias of level appropriate texts, and creating sophisticated writing. Students will use their language skills to expand their understanding of the literature, history and cultures of the Portuguese-speaking world.

Advanced Portuguese for Heritage Speakers 2 465 - 4 Credits

Honors - Grade 9 - Full Year - Prerequisite: Advanced Portuguese for Heritage Speakers 1

This course aims to support heritage speakers of Portuguese as they continue to develop literacy skills in the interpretive, interpersonal and presentational modes of communication. Students will focus on using oral language in formal contexts, engaging in the literary analysis of complex texts, and creating sophisticated writing. Students will use their language skills to expand their understanding of the literature, history and cultures of the Portuguese-speaking world.

Advanced Portuguese for Heritage Speakers 3 443 - 4 Credits

Honors - Grade 10 - Full Year - Prerequisite: Advanced Portuguese for Heritage Speakers 2

This course aims to support heritage speakers of Portuguese as they continue to develop literacy skills in the interpretive, interpersonal and presentational modes of communication. Students will focus on using oral language in formal contexts, engaging in the literary analysis of complex texts, and creating sophisticated writing. Students will use their language skills to expand their understanding of the literature, history and cultures of the Portuguese-speaking world.

Advanced Portuguese for Heritage Speakers 4 444 - 4 Credits

Honors - Grades 11 - Full Year - Prerequisite: Advanced Portuguese for Heritage Speakers 3

This course aims to support heritage speakers of Portuguese as they continue to develop literacy skills in the interpretive, interpersonal and presentational modes of communication and become college and career ready in Spanish. Students will focus on using oral language in formal contexts, interpreting complex texts and creating more sophisticated writing. Students will use their language skills to expand their understanding of the literature, history and cultures of the Portuguese-speaking world. This course is especially recommended for students enrolled in the Medical Interpretation course, who would also like to pursue a career in translation.

Advanced Portuguese for Heritage Speakers 5 445 - 4 Credits

Honors - Grades 12 - Full Year - Prerequisite: Advanced Portuguese for Heritage Speakers 4

This course aims to support heritage speakers of Portuguese as they continue to develop skills in the interpretive, interpresonal and presentational modes of communication. Students will focus on using oral language in formal contexts, interpreting complex texts and creating more sophisticated writing. Students will use their language skills to expand their understanding of the literature, history and cultures of the Portuguese-speaking world. This course is especially recommended for students enrolled in the Medical Interpretation course, who would also like to pursue a career in translation.

Medical Interpretation 1 470 - 4 credits

Honors - Grade 11 - Prerequisite: Teacher recommendation and Advanced Low level of Portuguese. Students who have not achieved an Advanced Low level of proficiency will be allowed to take the class if they take a Portuguese class concurrently

The national demand for trained health professionals is on the rise and health professions are in competition with other fields for young recruits. This program assists bilingual students to develop skills today that will allow them to pursue healthcare interpretation as a future profession or as a professional anchor as they work their way through college. In this course, students study interpreting ethics, modes and

techniques and sharpen their language conversion skills through supervised role-play practice, personal study and language lab activities. These activities do more than simply prepare the students for a future career, they also promote individual health awareness and disease prevention strategies. Students who complete the two years of the Medical Interpretation program and pass the final exam at the end of the second year, receive a Certificate of Accomplishment.

Medical Interpretation 2 471 - 4 credits

Honors - Grade 12 - Prerequisite: Medical Interpretation 1

In this course, students continue studying interpreting ethics, modes and techniques and sharpen their language conversion skills through supervised role-play practice, personal study and language lab activities. During this course, students expand the contexts of interpretation to Court, School and Community Interpretation. At the end of the program, students who receive an average of at least 85% in the class and are recommended by the teacher will take the final exam administered by Cross Cultural Communication Systems. Students who complete the two years of the Medical Interpretation program and pass the final exam at the end of the second year receive a Certificate of Accomplishment.

## PERFORMING ARTS

Ms. Sarah Worrest, Performing Arts Subject Matter Leader

Email: scworrest@hudson.k12.ma.us

In the Performing Arts, students learn to CREATE, PERFORM, PRODUCE and PRESENT art in the media of instrumental music, vocal music and drama. Students develop music literacy and theatrical literacy to better enable them to CONNECT with and RESPOND to art and the world around them, to express themselves, and to deepen and enrich their personal life experiences.

#### **Course Offerings:**

#### Drama Electives

Advanced Drama - Cycle 2: Directing

Drama I - Academic Elective

Drama II - Academic Elective

Public Speaking - Academic Elective

#### Music Performance Electives

Concert Band - Academic Elective

Vocal Performance Ensemble - Academic Elective

#### Music Studies Electives

Advanced Placement Music Theory (offered in alternate years, offered 2024-2025)

American Popular Music - Academic Elective (offered in alternate years; next offered 2025-2026)

Beginning Keyboard / Guitar Workshop - Academic Elective

Intermediate Keyboard / Guitar Workshop - Academic Elective

Drumming - Academic Elective

Music Theory I - Academic Elective (offered in alternate years; next offered 2025-2026)

Songwriting Through Music Technology - Academic Elective

#### Drama I 857 - 2 Credits

Academic Elective - Grades 8-12 - Semester

As a general introduction to theater, Drama I is a class where students will learn by doing. Through various class projects, students will learn the basics to casting a play, creating sets, costumes, and designing lights. Students will also learn the elements necessary to create properties, sound design, and basic play writing. Students must actively participate in this project and performance-based class.

#### Drama II 860 - 2 Credits

Academic Elective - Grades 9-12 - Semester - Prerequisite: Drama I, or by special arrangement with teacher

Building on the background established in Drama I, Drama II will focus on basic acting. Projects include scene productions where students will explore acting techniques and basic theatrical devices which include character analysis and script analysis. Students will learn the value of critique by assessing both their own and the work of others. Students must work both independently and cooperatively in this performance-based class.

Advanced Drama - Cycle 2: Directing - 876A/876- 2 or 4 Credits

Academic Elective - Grades10-12 - Full year or Semester - Prerequisite: Drama II or by special arrangement with the teacher

Note: This course can be repeated in consecutive years

In this course, students will intensify their study of all of the aspects of theater. During the three-year rotation of this course, we will focus specifically on acting, playwriting, and directing. Students will also explore the history and greater purpose of theater in society. Students will compare historical, cultural, and current events to innovations in theater, read and analyze a variety of plays, and enhance their theatrical skills. Students must work both independently and cooperatively in this intensive performance-based class.

Public Speaking 874 - 2 Credits

Academic Elective - Grades 8-12- Semester

Public Speaking will help develop the practical skill of presenting a speech in front of an audience. The goal of the class is to prepare students for success in typical public speaking situations and to provide them with the basic principles of organization and research needed for effective speeches. This class will include techniques to lessen speaker anxiety, enhance the appearance of confidence, improve articulation, vocal technique, and using visual aides to enhance one's presentations. Students must actively participate in this project-based class.

Concert Band 873/873A - 2 or 4 Credits

Academic Elective - Grades 8-12 - Full year or Semester

This course is open to students who have prior experience performing on a woodwind (flute, oboe, clarinet, saxophone, bassoon), brass (trumpet, horn, trombone, tuba), or percussion instrument, or by special arrangement with the instructor. This instrumental performing ensemble experience is designed to develop individual and team musicianship: instrumental performance technique, intonation and tonal skills, rhythmic skills, and expressive/interpretive skills. A variety of music will be explored and performed throughout the year. Students will be expected to participate in performances outside of class time and will be notified of required performances well in advance. Performances at annual winter and spring concerts, select school events, Veterans' Day and Memorial Day parades, music festivals, and other special events make up the band performance schedule. Advanced students will be encouraged to audition for the Central Massachusetts district, Massachusetts All-State, and national-level festivals. Students are strongly encouraged to repeat this course over their high school career, as literature study and technique focus changes every year on a five-year rotation.

Vocal Performance Ensemble 875/875A - 2 or 4 Credits

Academic Elective - Grades 8-12 - Full year or Semester

This course is open to any student interested in singing music of all types. Students will learn correct vocal technique, ear-training skills, beginning theory, and beginning sight-singing. Music from all periods will be performed in two and three-part harmony and some a cappella. This is a performance-based class: in addition to the HHS winter and spring concerts, there will be school and community opportunities to perform. Students are strongly encouraged to repeat this course over their high school career, as literature study and technique focus changes on a yearly basis. This course positions students to take Beginning Keyboard/Guitar, Music Theory I, and Songwriting through Music Technology.

Beginning Keyboard / Guitar Workshop 867 - 2 Credits

Academic Elective - Grades 8-12 - Semester

This course is open to students interested in learning keyboard and guitar. Students will learn fundamental keyboard and guitar skills, as well as basic musicianship and theory. Students will develop practice and performance techniques, accompanying skills, intonation, melodic and rhythmic skills, and interpretive approaches to music while learning a varied repertoire of music in different styles and from different time periods. This course positions students to take Intermediate Keyboard/Guitar, Music Theory I, Songwriting through Music Technology, and Vocal Performance Ensemble.

Intermediate Keyboard / Guitar Workshop 878- 2 Credits

Academic Elective - Grades 9-12 - Semester

This course is open to students who have completed Beginning Keyboard/Guitar Workshop or by permission of instructor. Students will build upon skills learned in Beginning Keyboard/Guitar Workshop, working at their own pace while deepening their knowledge and application of music theory, performance techniques, and musicianship, while learning a varied repertoire of music in different styles and from different time periods. This course can be repeated due to its individualized approach. This course positions students to take Music Theory I, Songwriting through Music Technology, and Vocal Performance Ensemble.

Drumming 877 - 2 Credits

Academic Elective - Grades 8-12 - Semester

You need no prior experience to join this hands-on percussion class. Students will play drums and other percussion instruments from around the world. Learn to be part of a drumline, play drum kit like a rock star, and improvise with your hands on a variety of international instruments. This instrumental performing experience is designed to develop individual and team musicianship, students will develop practice and performance techniques, melodic and rhythmic skills, and learn a varied repertoire of music in different styles and from

different time periods. This course positions students to take Beginner Keyboard/Guitar, Concert band, Music Theory I, Songwriting through Music Technology, and Vocal Performance Ensemble.

Songwriting Through Music Technology 888 - 2 Credits

Academic Elective - Grades 8-12 - Semester

Do you have ideas for songs that you always wanted to do more with? This class is the place to do it. This course will focus on melody and lyrics, music literacy, musical form, chord progressions, vocal harmonies, bass line development, and rhythm. Software for Music notation (such as Noteflight) and composition (such as Sound Trap), Web tools, and other Chromebook apps will be used. Students who have previously taken Keyboard/Guitar workshop, Vocal Performance Ensemble, Concert Band, or Music Theory 1 would be well-equipped to take this course. This course also positions students for further study in music.

*Music Theory I 864 - 2 Credits (offered alternate years; next offered 2025-2026)* 

Academic Elective - Grades 9-12 - Semester

This course is designed to introduce students to the fundamental components of music in the western tonal tradition. Course topics include Aural skills (ear-training/sight-singing), melodic and harmonic notation and reading, rhythm notation and reading, basic piano/keyboard skills, scale, mode, triad, and chord construction, simple two-part, three-part, and four-part harmony, introduction to musical forms and analysis, orchestration, composition, and other special topics in music theory as time allows. (Sections of this course are offered every other year, opposite Advanced Placement Music Theory) Students who have previously taken Keyboard/Guitar workshop, Vocal Performance Ensemble, Concert Band, or Songwriting through Music Technology would be well-equipped to take this course. This course positions students for further study in music.

History of American Popular Music - 2 Credits (offered alternate years; next offered 2025-2026)

Academic Elective - Grades 9-12 - Semester

The history of American popular music beginning with folk music, jazz, early rock and roll, and the music of the civil rights and protest era (the 60's) continuing with singer/songwriters of the 70's, Classic Rock and Hair Bands, Grunge, Boy Bands and Hip Hop. We will examine the social, political, and historical background issues which influenced each style. Students will learn to differentiate style characteristics between each of the identified musical eras. Course work will include active listening, reading and research into composers' lives and contributions to music history. Students are also encouraged to continue study with music electives.

Advanced Placement Music Theory 854 - 4 Credits

Advanced Placement Elective - Grades 10-12 - Full year (offered alternate years; offered 2024-2025)

Prerequisite: Music Theory I, or by special permission of the instructor

Course topics include Ear Training / Aural Skills; Composition of a bass line for a given melody, implying appropriate harmony; Realization of a figured bass.; Realization of Roman numeral chord progression; Analysis of repertoire, including study of motivic treatment, examination of rhythmic and melodic interaction between individual voices of a composition, and harmonic analysis of functional tonal passages; Introduction to twentieth-century scales, chord structures, and compositional procedures; Procedures based in common-practice tonality including: functional triadic harmony in traditional four-voiced texture (with vocabulary including non-harmonic tones and secondary dominants), tonal relationships, and modulation to closely related keys; Phrase structure and small forms (e.g. rounded binary, simple ternary, theme and variation, strophic); Introduction to Chromatic harmony, techniques of modulation, distant key relationships, and larger musical forms. Students are required to register for and take the AP Music Theory Exam offered in the spring.

## **VISUAL ARTS**

Ms. Erin Jameson, Visual Arts Subject Matter Leader

Email: ejameson@hudson.k12.ma.us

The Visual Arts program at Hudson High School follows the National Standards for Visual Arts and Media by offering traditional and contemporary art practices in two-dimensional and three-dimensional form. While experimenting with a variety of material, medium, artistic styles, techniques and tools, students explore ways to generate new ideas and give meaning to their art. They learn to observe, interpret, think critically and reflect on their own art making, as well as on the art making of others.

#### **Course Offerings:**

Art 1 - Academic Elective	Advanced Pottery - Academic Elective	
Art 2 - Academic Elective	Photography - Academic Elective	
Art 3 - Academic Elective	Advanced Photography - Academic Elective	
Art 4 - Honors	Fashion Design - Academic Elective	
Advanced Placement Studio Art	Textile Design and Clothing Construction - Academic Elective	
Pottery - Academic Elective	Sculpture - Academic Elective	

Art 1 812 - 2 Credits

Academic Elective - Grades 8-12 - Semester

Art 1 is a basic comprehensive course that covers all fundamentals of fine art: drawing, painting, design, color, technical applications, printing and a variety of media. If you are an upperclassman (grades 10-12) and have never taken visual art before, but believe you should be placed in Art 2 instead of Art 1, please see Ms. Jameson.

Art 2 822 - 2 Credits

Academic Elective - Grades 9-12 - Semester - Prerequisite: Art 1

Art 2 expands on the knowledge base of the elements and principles of design learned in Art 1. Students will further their degree of competency in technique and materials and will be introduced to more complex forms of artistic style and media.

Art 3 832 - 4 Credits, Full year

Academic Elective - Grades 10-12 - Prerequisites: Art 1 and Art 2

This full year course offers a strong foundation in drawing and painting using both black and white and color mediums. Subject matter covered will include visual representation from life; figure drawing and still life drawing will be explored. Shading, perspective and more advance techniques will be taught. Charcoal, pastel, pen and ink and other mediums will be used. Students will produce artwork of a quality that may go towards a senior year college portfolio. The curriculum for this course includes a Civic Action Project. Successful completion of this project fulfills the CAP graduation requirement.

Honors Art 4 843 - 4 Credits, Full year

Honors Elective - Grades 11-12 - Prerequisites: Art 1, Art 2, and Art 3

This course is designed for students who have a strong foundation in the above sequential art courses. It teaches an advanced level of theory and practice in the creative process. A variety of media will be used. Students will create a body of work suitable for a college entrance portfolio. This class is recommended for any student who has shown strength in the visual arts. This course is beneficial to students wanting to take AP Studio Art. Students do not need to be applying to art colleges in order to take this course.

Advanced Placement Studio Art 829 - 4 Credits, Full year

Advanced Placement Elective - Grades 11-12 - Prerequisite: Art 3 and preferably Art 4 and/or teacher approval

AP Studio Art sets a national standard for performance in the visual arts that contributes to the significant role the arts play in academic environments. This class encourages creative as well as systematic investigation of formal and conceptual issues. It emphasizes making art as an ongoing process that involves the student in informed and critical decision-making. The course helps students develop technical skills and familiarizes them with the functions of the visual elements. AP Studio Art will encourage students to become independent thinkers who will contribute inventively and critically to their culture through the making of art. The work done in AP Studio Art will reflect on the areas of quality and sustained investigation over the course of the school year. Concentrations are individual to each student. Students create independent portfolio pieces. Please see the AP website for more information on the 2D Design or Drawing Portfolio options. <a href="https://apstudents.collegeboard.org/courses/ap-2-d-art-and-design">https://apstudents.collegeboard.org/courses/ap-2-d-art-and-design</a>

Pottery 820 - 2 Credits

Academic Elective - Grades 9-12 - Semester

Students will learn hand-building techniques and will produce both functional and sculptural objects. Students will explore the capabilities of clay with a focus on careful joining and smoothing. High-fire clay and glazes will be used.

Advanced Pottery 828 - 2 Credits

Academic Elective - Grades 10-12 - Semester - Prerequisite: Pottery 820

Students will build on the skills and techniques learned in the previous pottery class and will be introduced to assignments that are more complex. Hand-building will be an important part of this class and wheel throwing will be introduced. This course will cover centering, opening, raising and finishing cylinders, bowls, vases and other functional objects.

Photography 817 - 2 Credits

Academic Elective - Grades 10-12 - Semester

This course is an introduction to black and white photography. Students will use a variety of materials and programs such as pinhole cameras, 35mm cameras with film, Instagram, social media, and digital formats. Students will focus on photograph composition, picture taking, and studies in artist design and contrast. A variety of photographers will be studied. In this class, the student's photographic skills will expand over the course of the semester by experimenting with different forms of work in and outside of the darkroom. Students will create photography projects based on alternative methods of photography and will work with iPads, smart phones and digital media. Students will have the opportunity to develop a photography portfolio of their work and will have a chance to express themselves creatively through the methods and techniques of photography. Students in the class have the ability to move on to AP Studio Art in the future if they would like to advance their studies in photography.

Advanced Photography 818 - 2 Credits

Academic Elective - Grades 10-12 - Semester

Prerequisite: Photography 817

This course is a continuation of Photography. Students will focus on photograph composition, picture taking, and studies in artist design and contrast. A variety of photographers will be studied. In this class, the student's photographic skills will expand over the course of the semester by experimenting with different forms of work in and outside of the darkroom. Examples of what will be created are double exposures, vignetting, surrealist compositions, alternative processes with the enlarger, work on larger paper, as well as work on alternative artworks based on photography skills. Students will have the opportunity to develop a photography portfolio of their work and will have a chance to express themselves creatively through the methods and techniques of photography. Students will explore using cell phones, digital media and other multimedia technology as a tool in taking photographs. Students in the class have the ability to move on to AP Studio Art: 2D Design in their senior year.

Fashion Design 837 - 2 Credits

Academic Elective - Grades 9-12 - Semester

(Previously called Introduction to Creative Fashion Design)

This project-based course explores the fashion design industry. Students will gain experience in developing skills needed as a trend forecaster, personal stylist, fashion illustrator, and fashion designer. Students will analyze designers' collections while learning about past,

current, and forecasted trends. Through hands-on projects, students will develop skills in illustrating figures and apparel, produce trend boards and fashion flat collections using CAD, and translate designs into 3D garments with non-traditional materials.

Textile Design & Clothing Construction 839 - 2 Credits

Academic Elective - Grades 9-12 - Semester

(previously called Advanced Creative Fashion Design)

This project-based course is for students interested in exploring the fashion design industry and developing skills that are needed in the fields of a textile designer, fiber artist, and fashion designer. Students will transform fabric and clothing through hands-on projects. They will develop skills in embroidery, screen-printing, fabric dyeing, and making clothes using commercial patterns and sewing machines. No prior sewing experience is needed.

Sculpture 830 - 2 Credits

Academic Elective - Grades 10-12

Prerequisites: Pottery 820 and Art 1 812

This comprehensive course explores the principles of sculptural creation, fostering a deep understanding of form and composition. Various sculptural materials, such as wire, plastic, foam, cardboard, found objects will be used. Through hands-on projects, historical context, and contemporary practices, students will develop artistic sensibilities and technical skills in sculpting. Students will grasp the fundamentals of form, structure, and spatial relationships, applying these principles to create cohesive and expressive sculptures.

## EARLY CHILDHOOD EDUCATION

Mrs. Jeannie Graffeo, Early Childhood Education and Wellness Subject Matter Leader 978-567-6250 ext. 10152 Email: jgraffeo@hudson.k12.ma.us

Academic Elective courses are offered in Child Growth and Development and an opportunity for a career pathway in Early Education and Care. Through the Early Childhood Education I and II courses, students engage in classroom studies and an internship program. To prepare students to work in Early Education and Care (EEC), students develop a foundation of knowledge of 3-5 year-olds using the National Standards and the 2017 Massachusetts Department of Early Education and Care (MA Dept. EEC) Categories of Study in the classroom and in the field. The internship program is conducted in PreK-K sites in the Hudson Public Schools (HPS) and in preschool/daycare centers within the Hudson region that have formed a collaboration. Other placements are not an option for students to seek their internship hours. Through the internship experience, students will work with children ages 3-5 years in order to complete their 150 hour requirement and fulfill requirements from the MA Dept. of EEC. After graduation from Hudson High School, completion of the 3 Early Childhood courses and associated requirements with a B average or better, students will have the opportunity to apply for MA Dept. EEC certification.

Students and families will need to provide exclusive transportation to and from the off-campus internship sites.

Articulation Agreement: Students who complete and pass Child Growth and Development (Course 869), Early Childhood Education I (Course 893) and Early Childhood Education II (Course 894) with a minimum final grade of B- and who maintain a minimum GPA of 2.0 are eligible to receive 3 elective credits for Early Childhood Education (ECE888) through Quinsigamond Community College.

#### **Course Offerings:**

Child Growth and Development - Academic Elective	Early Childhood Education II - Academic Elective
Early Childhood Education I - Academic Elective	

Child Growth and Development 869 - 4 Credits

Academic Elective - Grades 9-12

This course encompasses the study of the developing child from birth to age 16. Emotional, physical, social and intellectual developments are considered simultaneously. As a result of this study, the student should not only have a better understanding of the young child but also have a fundamental background for parenthood. This is the first of three courses needed for the MA Dept. of EEC pathway. *The curriculum for this course includes a Civic Action Project. Successful completion of this project fulfills the CAP graduation requirement.* 

Early Childhood Education I 893 - 4 Credits

Academic Elective - Grades 10-12 - Prerequisite: Students must have completed and passed Child Growth and Development with a B or better, may undergo a CORI background check, and/or may be required to be fingerprinted. This course can be taken with the permission of Early Childhood Instructor.

Early Childhood Education I is a field study program offered to sophomores and juniors for the MA Dept. of EEC certification pathway. The course can also be taken by seniors; however, seniors will not qualify for the certification pathway. Students and families will provide exclusive transportation from school and site.

The concept of pre-school education and development of 3-5 year olds are studied in the classroom while applying skills at an internship. Students will work in PreK-K sites in the Hudson Public Schools or in preschool/daycare centers within the Hudson region that collaborate with the Hudson Public Schools. To prepare students to work in Early Childhood Care and Education, students will begin to develop a foundation of knowledge of 3-5 year-olds and have opportunities to share learning experiences with peers through classroom experiences as they also intern in the field. The students will participate in routine care, play activities including a puppet show, plan programs and environments, implement classroom management practices, nurture child health and safety, and implement childcare policies. Students may be required to complete a CORI for each work site. In the event that a daycare/ school requires a further background check (i.e. fingerprinting), these fees will be the responsibility of the student and not the Hudson Public Schools. The internship program is an experience similar to employment. Therefore, students are responsible for following the procedures and expectations of the Employee handbook of the daycare/ school.

Early Childhood Education II 894 - 4 Credits

Academic Elective - Grade 12 - Prerequisite: Students must have completed and passed Early Childhood Education I with a B or better, may undergo a CORI background check, and/or may be required to be fingerprinted. Students will need to provide their own transportation to the off-campus internship sites.

Early Childhood Education II is a field program of study offered to seniors. This course is the next level to ECE I and is a continuation to the internship established and is the final course for the MA Dept. of EEC license pathway (see above ECE I description). The students will participate in routine care, play activities, create manipulatives, and learn to plan and implement lesson plans in all content areas connected to the state preschool guidelines and standards. Students may be required to complete a CORI for each work site. In the event that a daycare/school requires a further background check (i.e. fingerprinting), the fees associated will be the responsibility of the student and not the HPS. The internship program is an experience similar to employment. Therefore, students are responsible for following the procedures and expectations of the Employee Handbook of the daycare/school.

## **WELLNESS**

Mrs. Jeannie Graffeo, Early Childhood Education and Wellness Subject Matter Leader 978-567-6250 ext. 10152

Email: jgraffeo@hudson.k12.ma.us

Wellness Mission Statement: The Hudson Public Schools Wellness Department empowers every student to acquire evidence-based skills for lifelong health and wellness. Students will demonstrate an understanding of this content and develop health literacy, self-management, promotion and advocacy. Guided by Massachusetts State Health Frameworks and National Health Education and Physical Education Standards, this comprehensive program provides a safe learning environment that respects the diversity of all individuals. The Wellness program provides each student with critical thinking, social/emotional, and problem-solving skills that will assist in understanding the importance of wellness and their responsibility to their community.

#### **Course Offerings:**

Wellness 8: General Fitness & Health Concepts for Early Adolescents - Academic	Wellness 12: Individual Fitness Practices & Lifetime Health Strategies - Academic
Wellness 9: Individual Lifetime Fitness Concepts & Health Strategies for Youth - Academic	Principles of Wellness 8, 9, & 10 - Academic
Wellness 10: Cooperative, Competitive & Health- Enhancing Physical Activities & Relationship Concepts - Academic	Principles of Wellness 11 & 12 - Academic
Wellness 11: Adventure Activities, Advanced Conditioning and Making Healthy Decisions - Academic	Mindfulness and Movement - Academic Elective

All grade level Wellness courses provide concepts and themes in: Wellness; Anti-Bullying and Healthy Relationships; Social /Emotional Learning; Dialectical Behavior Therapy (DBT); Substance Use Disorders; Fitness; Group Initiatives; Dance/Rhythmic activities; Mind-Body-Spirit Connections. Based on data from the Metro-West Health Adolescent Survey and National Standards, curriculum is planned developmentally in the Wellness content areas of: Decision Making; Human Anatomy and Growth; Relationships; Games and Sports; Targeted Fitness Areas.

Wellness 8: General Fitness & Health Concepts for Early Adolescents 010

Academic - Grade 8 - Semester

The physical education component of this wellness course will include team building exercises, group initiatives, cooperative learning, net games, and rhythmic movement. The health component will build on concepts introduced during middle school that impact community members including: anti-bullying strategies, healthy relationships, stress and stress reduction, communicable and non-communicable diseases, drug awareness, hygiene, and reproduction. School counselors will extend learning with three classes on stress management, learning and productivity, and healthy relationships.

Wellness 9: Individual Lifetime Fitness Concepts & Health Strategies for Youth 011 - 2 Credits

Academic - Grade 9 - Semester

In this course, students will learn stress reduction basic techniques and resistance training. Students will also experience group initiatives, square/line dancing, and territorial games. In the health component, students will learn about individual and group aspects of nutrition, consumer health, and mental health. School Counselors will extend learning with four classes on mental health, personal strengths and interests, career exploration, and academic planning.

Wellness 10: Cooperative, Competitive & Health-Enhancing Physical Activities, and Disease Prevention 012 - 2 Credits Academic - Grade 10 - Semester

Students will participate in traditional team sports as well as individual physical activities. Students develop guided relaxation practices as part of the physical education's Body-Mind-Spirit theme and engage in dances through the decades. In the health component of the class, the students will complete a Cardiopulmonary Resuscitation (CPR) unit with the opportunity to become CPR certified focus on

disease prevention and the body systems and learn to build health relationships by understanding family challenges. School Counselors will extend learning with four classes on career exploration and readiness and financial literacy Interest inventories (Myers-Briggs, Holland's Code), extra-curricular involvement and social media presence, and Reality Fair.

Wellness~11: Adventure~Activities,~Advanced~Conditioning~and~Making~Healthy~Decisions~013~-2~Credits

Academic - Grade 11 - Semester

The physical education component of this course will provide students opportunities for indoor and outdoor team building adventure activities, Body Resistance Training Part II, Rhythmic Gymnastics, and Stress Reduction Techniques. In the health component, students will learn more about interpersonal relationships and Consumer Sciences; sexual identity and diseases; tobacco; alcohol; and other substance use disorders. School Counselors will extend learning with three classes: options after high school, initial college planning, and self-care.

Wellness 12: Individual Fitness Practices & Lifetime Health Strategies 014 - 2 Credits

Academic - Grade 12 - Semester

Students in the physical education component of this class will increase their understanding of the various ways to stay active and healthful after high school. Content will include group initiatives, interpretive dance, and lifetime activities. In health, students will focus on reducing stress and time management and extend learning of human reproduction and STDs. Students will also have an opportunity to be recertified in CPR. School Counselors will extend learning with three classes: college application process, resume building, after high school transition.

Principles of Wellness 8-10 017- 2 Credits

Academic - Grades 8, 9, & 10 - Semester

In this course, students will learn content in small developmentally appropriate groups and engage in the areas of Wellness through Health Education in Anti-Bullying and Healthy Relationships; Social /Emotional Learning; Dialectical Behavior Therapy (DBT); Human Anatomy and Growth; Substance Use Disorders; and Decision Making. The course will provide content in the areas of Wellness through Physical Education in Fitness; Group Initiatives; Dance/Rhythmic activities; Mind-Body-Spirit Connections; and Games and Sports.

Principles of Wellness 11-12 018 - 2 Credits

Academic - Grades 11 & 12 - Semester

In this course, students will learn content in small developmentally appropriate groups and engage in the areas of Wellness through Health Education in Anti-Bullying and Healthy Relationships; Social /Emotional Learning; Dialectical Behavior Therapy (DBT); Human Anatomy and Growth; Substance Use Disorders; and Decision Making. The course will provide content in the areas of Wellness through Physical Education in Fitness; Group Initiatives; Dance/Rhythmic activities; Mind-Body-Spirit Connections; and Games and Sports.

Mindfulness and Movement 015 - 2 Credits

Academic Elective - Grades 11-12 - Semester

This course will cover the basic knowledge, attitudes, and concentration necessary for the body and mind to benefit from mindfulness and movement exercises. Flexibility, balance, and body alignment will be part of each exercise session. Students will practice the skills of proper breathing/relaxation techniques as a form of stress management.

# SPECIAL PROGRAMS

Mr. Matthew Sanko, Coordinator of Special Ed Evaluation & Services 6-12, 978-567-6100 ext. 42134

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Students requiring specialized instruction access the school's curriculum in a variety of ways depending on individual student needs. This includes access to a modified curriculum within mainstream classes, as well as specialized instruction in substantially separate classes that is geared toward improving basic skills, life skills, and passing the MCAS while focusing on the student's individualized education program (IEP). The Hudson High School special education department utilizes and adheres to the Massachusetts Frameworks & Common Core of Learning state standards. Modifications are determined during the Special Education team meeting process, and are designed to meet the disability-related needs of individual students. Students receive these different services based on their eligibility and as written in their IEP.

#### **Course Offerings:**

Reading Intervention - Academic Elective	US and World History Survey - Academic
Academic Support - Academic	Principles of Algebra - Academic Principles of Algebraic Geometry - Academic
Communication for School, Work and Community - Academic Elective	Principles of Intermediate Algebra - Academic Principles of Consumer Mathematics - Academic
Literature and Literacy - Academic	Principles in Biology - Academic

Reading Intervention 198 - 4 Credits

Academic Elective - Grades 8-12 - Full year

Reading Intervention is an elective taught by a special education teacher for students in grades 8-12 who have been identified as needing a developmental reading program. Students are assigned to the elective as part of the Individualized Education Plan (IEP) process.

Academic Support 197 - 4 Credits

Academic - Grades 8-12 - Full year

Academic Support is an elective taught by a special education teacher for students in grades 8-12. The purpose of this class is to teach students compensational, organizational, transition planning, understanding of the student's disability to enhance self- advocacy skills. This course uses a variety of strategies to assist students with organizing assignments, breaking down long-term projects, acquiring basic skills, and increasing fluency, vocabulary and comprehension depending on the student's individual needs. Students will learn skills that will enable them to achieve academic success by receiving instruction in a supportive learning environment. Students will receive academic support and learn appropriate strategies that will help them succeed across the curriculum. Students are assigned to this Elective as part of the Individualized Education Program (IEP) process.

Communication for School, Work, and Community 899 - 2 Credits

Academic Elective - Grades 9-12 - Prerequisite: teacher recommendation

Students will learn how to use the social communication skills needed for success in future academic, personal, and professional situations. Students will increase their opportunities for social interactions and will receive instruction in a supportive learning environment. In a world that increasingly values effective interpersonal skills, this course places a special emphasis on fostering meaningful connections with peers and increasing student confidence.

Literature and Literacy 992 - 4 Credits

Academic - Grades 9-12 - Full year

In this course, students develop reading, writing, and discussion skills across a variety of literary genres. Students examine themes, characters, and other literary elements in both independently chosen and shared texts. By exploring various themes through multiple genres of text, students refine their writing skills and complete analytical, persuasive, and expository pieces along with personal and creative writing assignments.

US and World History Survey 998 - 4 Credits

Academic - Grades 9-12 - Full year

This course is a thematic exploration of the history of the United States. Students examine key themes across the entire history of the US. Units of study include the history of immigration, women's history, the US in wartime, and America in black and white. Students examine both primary and secondary sources as well as film. There are opportunities for students to complete both formal and informal writing assignments, image and document analysis, class discussion and debate, and oral presentations. There is also an emphasis on studying current events as a means to connect historical themes to the present. The curriculum for this course includes a Civic Action Project. Successful completion of this project fulfills the CAP graduation requirement.

Principles of Algebra 996 - 4 Credits

Academic - Grade 9 - Full Year

This course will focus upon students' individual needs in preparation for success in further secondary mathematics. During this course students will review basic math facts, all Pre-Algebra concepts, and begin studying Algebra I topics. This course will utilize manipulatives, math labs, problem-solving techniques, lecture, and test-taking skills in mathematics. Course instruction will be focused on each student's specific improvement area as indicated by performance objectives (computation, measurement, number sense, algebra, geometry, etc.). Instruction will include data from multiple assessment formats.

Principles of Algebraic Geometry 996A - 4 Credits

Academic - Grade 10 - Full year

This course will focus upon students' individual needs in preparation for success in further secondary mathematics courses. During this course students will review most Algebra I and Geometry concepts (through the foundation of Algebra), and prepare for further secondary mathematics. This course will utilize manipulatives, math labs, problem-solving techniques, lecture, and test-taking skills in mathematics. Course instruction will be focused on each student's specific improvement area as indicated by performance objectives (computation, measurement, number sense, algebra, geometry, etc.). Instruction will include data from multiple assessment formats.

Principles of Intermediate Algebra 996B - 4 Credits

Academic - Grade 11 - Full year

This course is intended for students who have completed Algebra 1 and Geometry, but may not have built a solid mathematical foundation for the concepts that you will study in your college math courses. You will explore the relevance of mathematics to the real world through a variety of practical, real-life applications. Topics discussed in this course include several fundamental concepts of algebra including equations and inequalities, along with linear, quadratic, exponential functions, trigonometry, and discrete math. Emphasis will be placed on real-world applications of these topics and bringing mathematical thinking to life. The pace of this course will be fairly deliberate, recognizing the need to review previously learned concepts.

Principles of Consumer Mathematics 996C - 4 Credits

Academic - Grades 9-12 - Full Year

This course will reinforce general math topics (such as arithmetic using rational numbers, measurement, ratio and proportion, and basic statistics) and apply these skills to consumer problems and situations. Applications may include budgeting, taxation, credit, banking services, insurance, buying and selling products and services, home and/or car ownership and rental, managing personal income, and investment. Students will also apply algebra concepts to a variety of business and financial situations, by combining a mix of algebra, geometry and statistical skills.

Principles in Biology 994 - 4 Credits

Academic - Grades 9-12 - Full year

This course is designed to strengthen students' skills and knowledge within the life science and physical science domains. The lab-based curriculum emphasizes a cooperative, project-based approach. Students have opportunities for differentiated work based on previously earned credits, current events, as well as teacher and student interests.

## ENGLISH LEARNER EDUCATION PROGRAM

Ms. Wendy Anderson, Director of English Learner Education 978-567-6100 ext. 41113

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The English Learner Education (ELE) Program at Hudson High School is designed to meet the diverse needs of adolescent English learners (ELs). The goal of the program is to advance the achievement of English learners by guiding their development of the language and literacy skills needed for success in high school and preparedness for college and career. The program has several main components - English Language Development (ELD) classes that provide instruction in English language and literacy, Content-based Sheltered English Instruction (SEI) courses for English Learners newly arrived to U.S. schools that teach content standards with a special focus on developing beginning-level English skills, and Academic Seminar (AS) classes that support students in developing the academic skills needed for success in high school classes as well as college and career. Course placement is determined based on formal assessments of English proficiency in conjunction with academic transcripts, prior schooling, native language literacy, parental input, and student goals.

#### **Course Offerings:**

English Language Development 1A and 1B - Academic	Academic Seminar - Academic
English Language Development 2A and 2B - Academic	Bioscience Foundations
English Language Development Intermediate - Academic	Physics Foundations
English Language Development Advanced - Academic	US and World History

English Language Development 1A and 1B 755/756 - 4 Credits each

Academic Grades 8-12 - For English learners only

English Language Development 1 (ELD 1) develops the entering student's language and literacy skills for both social and academic settings. Through guided reading, writing, and discussion focused on essential questions, students begin to develop their abilities to use English to achieve their personal and academic goals. This course fulfills an English Language Arts credit and a History/Social Studies credit. By the end of the two concurrent courses, students should be able to communicate with English-speaking administrators, teachers, and students and perform academic work in English with substantial support. Students should also have a basic background in US History to prepare them for an academic or honors level Social Studies courses.

English Language Development 2A and 2B 750/753 - 4 Credits each

Academic - Grades 8-12 - For English learners only

Prerequisite: English Language Development 1A and 1B or qualifying score on language assessment

English Language Development 2 (ELD 2) develops the beginning student's language and literacy skills with a continued focus on social and academic settings. Through guided reading, writing, and discussion focused on essential questions, students expand their abilities to use English to achieve their academic goals. This course fulfills an English Language Arts credit. By the end of the two concurrent courses, students should, with significant support, be able to utilize reading strategies to engage with academic texts, use knowledge of academic genres and the writing process to construct academic texts, comprehend and take notes on academic lectures, deliver academic presentations, and engage in academic discussions.

English Language Development Intermediate 752 - 4 Credits 760 - 4 Credits

Academic - Grades 8-12 - For English learners only

Prerequisite: English Language Development 2A and 2B or qualifying score on language assessment

English Language Development Intermediate cultivates the developing and expanding student's English language and English literacy skills with a focus on academic settings. ELD Intermediate students refine their abilities to use academic English through guided reading, writing, and discussion focused on essential questions. By the end of this course, students should, with limited support, be able to select and utilize appropriate reading strategies to engage with diverse academic texts, use knowledge of academic genres and the writing process to construct a variety of academic texts, comprehend and take notes on academic lectures, deliver academic presentations, and engage in academic discussions. This course is repeatable.

English Language Development Advanced 767 - 4 Credits 770 - 4 Credits

Academic - Grades 8-12 - For English learners only

Prerequisite: English Language Development Intermediate or qualifying score on language assessment

English Language Development Advanced strengthens the bridging and reaching student's language and literacy skills with a focus on academic settings. ELD Advanced students refine their abilities to use academic English through guided reading, writing, and discussion focused on essential questions. By the end of this course, students should have a sophisticated ability to independently select and utilize appropriate reading strategies to engage with diverse academic texts, use knowledge of academic genres and the writing process to construct a variety of academic texts, comprehend and take notes on academic lectures, deliver academic presentations, and engage in academic discussions. This course is repeatable.

Academic Seminar 769 - 2 Credits

Academic - Grades 8-12 - Semester - For English learners or Former English learners only

Academic Seminar (AS) assists students in developing the academic skills needed to for success in content area classes and for college and career readiness. Students are expected to build independence and motivation as learners by setting and tracking academic goals and working diligently both in and out of class. Students document and reflect on their learning by tracking their academic progress, writing regular reflections, and maintaining ongoing communication with the instructor. Note: Course may be taken over consecutive semesters.

Bioscience Foundations 595 - 4 credits

Academic - Grades 8-9 (Lab Science) - For English learners only

Bioscience Foundations 8-9 is a general life science course which focuses on developing listening, speaking, reading and writing skills in problem-based bioscience contexts. Students develop language skills and science content understanding through hands-on investigations and small group work.

Physics Foundations (410E) - 4 credits

Academic - Grades 10-12 (Lab Science) - For English learners only

Physics Foundations is an introductory, inquiry-based lab course. The course focuses on forces and motion, momentum, energy, waves, and electromagnetism. Students develop language skills and science content understanding through hands-on investigations and small group work. By the end of this course, students will be prepared to take the Physics Massachusetts Comprehensive Assessment System (MCAS) test.

US and World History 323E - 4 Credits

Academic - Grades 10-12 - For English learners only

US and The World History is designed for beginner level English language learners. In this course, students are introduced to the foundational concepts and academic skills needed to succeed in the formal study of history. The class focuses on world and United States geography, political and economic systems, fundamental documents and events in US history, and the rights and responsibilities of citizenship. Students develop their skills through classroom analysis of primary and secondary source documents, including written texts, maps, and charts. Students also develop their skills through discussion, reading, writing, research, and presentations. This course aims to prepare English language learners for success in the core US and the World History courses at Hudson High School.

Integrated Math 1 255 - 4 Credits

Academic - Grade 10-12 - (For English learners only) - Depending on Placement Test, may also take Geometry

This course is limited to students in English Learners who need additional skills to be prepared for Algebra 2. This course will develop standards and skills appropriate to the Grade 10 MCAS Assessment. Students will develop skills in working with polynomials, linear equations, quadratic equations and their connections with geometry as well as practical applications and statistical basics. Based on level of mastery and language acquisition skills, students will move to either Intermediate Algebra, Geometry or Algebra 2.

### **CENTRAL OFFICE ADMINISTRATION**

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Ms. Kerry Bartlett
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Ms. Sarah Davis, Science
Ms. Jeannie Graffeo, Early Childhood/Wellness
Ms. Erin Jameson, Visual Arts
Mr. Robert Knittle, Mathematics
Ms. Ana Pimentel, World Language
Mr. Matthew Sanko, Special Education Team Chair
Ms. Ellen Schuck, Technology
Mr. Todd Wallingford, English/Social Studies
Ms. Sarah Worrest, Performing Arts

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