Gardner High School Program of Studies



2021-2022

GHS MISSION STATEMENT	4
21 ST CENTURY LEARNING RUBRICS	5
SCHOOL COUNSELORS	11
ACADEMIC LEVEL OF COURSE DESCRIPTION	13
GARDNER HIGH SCHOOL GRADUATION REQUIREMENTS	17
REQUIREMENTS FOR POST SECONDARY	18
GRADE 8 CLASSES	19
MASS CORE	20
MASSACHUSETTS STATE COLLEGE & UNIVERSITY REQUIREMENTS	21
COURSE CHANGES-ADD/DROP	23
MARKING SYSTEM	23
HONOR ROLL	23
ELIGIBILITY FOR ALL EXTRA-CURRICULAR ACTIVITIES	23
NCAA	24
GRADE POINT AVERAGE/WEIGHTING	24
VALEDICTORIAN/SALUTATORIAN	24
ART	25
ENGLISH	29
FOREIGN LANGUAGE	33
HEALTH AND WELLNESS	36
MATHEMATICS	39
PERFORMING ARTS	44
SCIENCE	47
SOCIAL STUDIES	55

TECHNOLOGY/ENGINEERING EDUCATION	60
STUDENT SUPPORT SERVICES	64
SPECIAL EDUCATION	65
RISE	67
ENGLISH LANGUAGE LEARNERS	69
ADDITIONAL COURSE OFFERINGS	72
INTERNSHIPS	74
DUAL ENROLLMENT COURSE AND MOUNT WACHUSETT C.C. INITIATIVES	75
ALTERNATIVE COURSE OFFERINGS	81
GENERAL INFORMATION	82

Gardner High School Mission Statement

VISION: We will be the premier school of choice for our students and their families.

MISSION: Gardner High School provides an enriched academic environment fostered through relevance, rigor and relationships and ensures that each student learns at a high level.

- In the classroom, we challenge all students in a supportive, positive environment that promotes scholarship and helps students develop the skills and characteristics to make them successful for their future.
- On the field, stage, or court, we create fun, engaging opportunities for students to excel in athletics, the arts, and co-curricular groups.
- We promote personal development and a sense of service to our community.

CORE VALUES: C.A.R.E.

- Community: We work together to achieve for all in a culture steeped in tradition
- **Appreciation**: We accept our roles, respect different perspectives, and acknowledge the good in others.
- **Responsibility**: We own our actions and honor our commitments by being prepared, involved community members.
- Excellence: We do our best and take pride in all we do in our community.

21ST CENTURY LEARNING EXPECTATIONS

- Communicate
- Critically Think and Problem Solve
- Collaborate
- Creatively Innovate

BELIEFS ABOUT STUDENT LEARNING

We believe that all students can learn at a high level with help and support if:

- All students are told over and over again in meaningful and compelling ways that academic achievement demands that same kind of hard work that is required to become the best in other arenas--at baseball, basketball, playing an instrument, etc...
- We know what excellent work looks like and what skills and competencies are needed for students to do excellent work, teaching the constitutive skills and competencies while providing examples of excellent work and careful guidance.
- We know where each student is academically and the skills, competencies and knowledge that are required for each one of them to access our challenging curriculum.

MOTTO: Omnia Labor Vincit (Latin for "Work Conquers All")

MAXIM: Good is not good enough

21ST CENTURY RUBRICS FOR CRITICAL THINKING & PROBLEM SOLVING

Expectation	Reaching 4	Expanding 3	Developing 2	Entering/Beginning 1/0
Understand the Problem Identify and define key issue/s and/or problem/s	Clearly, accurately, and appropriately identifies key issue/s and/or problem/s	Identifies most or all key issue/s and/or problem/s. Some minor inaccuracies or omissions may be present, but do not interfere with meaning.	Identifies some key issue/s and/or problem/s. May have some inaccuracies, omissions or errors present that interfere with meaning.	Most or all of key issue/s and or problem/s are not identified or defined, or are identified or defined inaccurately. Meaning is unclear.
Model the Problem/Look for Structure /Patterns Present and Analyze Data/Information	Presents relevant/appropriate, sufficient and credible data/information. Clearly analyzes information for accuracy, relevance, and validity. Information clearly relates to meaning.	Presents sufficient and relevant/appropriate data/information. Generally analyzes data/information for accuracy, relevance and validity. Minor inaccuracies or omissions do not interfere with analysis or meaning.	Presents some appropriate data/information. May miss or ignore relevant data/information. Analysis is limited or somewhat irrelevant/inappropriate. May contain inaccuracies or omissions that interfere with analysis and/or meaning.	Does not present relevant and appropriate data/information. Fails to analyze, or uses inaccurate or irrelevant/inappropriate analysis of data/information. Copies information with analysis.
Be Precise Apply a Multidimensional approach/Consider Context	Clearly applies a multidimensional approach. Synthesizes various perspectives . Correct answer with appropriate interpretation/description/units. Acknowledges limits of position or context - when appropriate.	Acknowledges multiple approaches. Some synthesis of perspectives. Correct answer with limited interpretation/description/units. Some acknowledgement that position may have limits. Acknowledgement context-when appropriate	Somewhat simplified position with some sense of multiple approaches. Minor or vague synthesis of perspectives. Incorrect answer with limited interpretation/description/units. Some acknowledgement positions may have limits. May not acknowledge context - when appropriate.	Student's position is grounded in a singular, often personal perspective Position may be simplistic and obvious. Incorrect answer with no interpretation/description/ units. Little or no awareness that position may have limits or context - when appropriate.
Communicate Answer with Reasoning Demonstrate Sound Reasoning and Conclusions	Reasoning is logical and creative, consistent, complete and often unique. Conclusion is complex and/or detailed, well supported, creative, complete, and relevant.	Reasoning is mostly logical, complete, and consistent. Demonstrates some unique or creative insight. Conclusion is generally complete, supported, and mostly consistent and relevant.	Reasoning contains elements of logic and/or creative insight, but not fully resolved. May have minor inconsistencies or omissions. Conclusion is relevant but abbreviated or simplified, not fully supported, and/or contains minor inconsistencies.	Reasoning is illogical, simplistic, and inconsistent or absent. Conclusion is simplistic and stated as an absolute, or inconsistent with evidence or reasoning. Lack of coherent or clear conclusion.

21ST CENTURY RUBRICS FOR CREATIVITY/INNOVATION

Expectation	Reaching 4	Expanding 3	Developing 2	Entering/Beginning 1/0
Defines the creative challenge	Develops insight about the particular needs and interests of the target audience	Understands the purpose driving the process of innovation (who needs this and why)	Understands the basic purpose for innovation but does not thoroughly consider the needs and interests of the target audience	May just follow directions without understanding the purpose for innovation or considering the needs and interests of the target audience.
Identify Sources of Information	Promotes divergent and creative perspectives during discussions	In addition to typical sources, finds, unusual ways or places to get information (adult, expert, community member, business or organization literature)	Finds one or two sources of information that are not typical Offers new ideas during discussions, but stays within narrow perspectives	Uses only typical sources of information (website, book, article) Does not offer new ideas during discussions
Generate and Select Ideas	Uses idea-generating techniques to develop several original ideas for product(s) Uses ingenuity and imagination, going outside conventional boundaries, when shaping ideas into a product. Seeks multiple sources of feedback and critique to revise the product to exceed the needs of the intended audience.	Uses idea-generating techniques to develop an original idea(s) for product(s) Carefully evaluates the quality of ideas and selects the best one to shape into a product. Asks new questions, takes different perspectives to elaborate and improve on the selected idea Seeks out and uses feedback and critique to revise the product to better meet the needs of the intended audience.	Develops some original ideas for produce(s), but could develop more with better use of idea-generating techniques. Evaluates ideas, but not thoroughly before selecting one Asks a few new questions but may make only minor changes to the selected idea Shows some imagination when shaping ideas into a product, but may stay within conventional boundaries Considers and may use some feedback and critique to revise a product, but does not seek it out	Stays within existing frameworks, does not use idea-generating techniques to develop new ideas for product(s) Selects one idea without evaluating the quality of ideas. Does not ask new questions or elaborate on the selected idea Reproduces existing ideas, does not imagine new ones Does not consider or use feedback and critique to revise product
Present Work to Uses/Target Audience	Creates visually exciting presentation that includes interactive elements	Creates visually exciting presentation media Includes elements in presentation that are especially fun, lively, engaging, or powerful to particular audience	Adds some interesting touches to presentation media Attempts to include elements in presentation that make it more lively and engaging	Presents ideas and products in typical ways (text-heavy PowerPoint slides, recitation of notes, no interactive features)
Originality	Is new, unique, surprising, offers a fresh perspective, expression, or point of view Successfully break rules and conventions, uses common materials or ideas in new, clever and unique ways	Is new, unique, surprising, shows a personal touch May successfully break rules and conventions, or use common materials or ideas in new clever and surprising ways	Has some new ideas or improvements, but some ideas are predictable or conventional May show a tentative attempt to step outside rules and conventions, or find new uses for common materials or ideas	Relies on existing models, ideas, or directions, it is not new or unique Follows rules and conventions, uses materials and ideas in typical ways
Effectiveness	Is seen as useful and valuable, it solves the defined problem and exceeds the identified need Improves quality of life for audience	Is seen as useful and valuable, it solves the defined problem or meets the identified need Is practical, feasible	Is useful and valuable to some extent, it may not solve certain aspects of the defined problem or exactly meet the identified need Unclear if product would be practical or feasible	Is not useful or valuable to the intended audience /user Would not work in the real world, impractical or unfeasible
Style	Is well-crafted, striking, designed with a distinct style and is appropriate for multipurpose Combines different elements into a coherent whole with a distinct style	Is well-crafted, striking, designed with a distinct style but still appropriate for the purpose Combines different elements into a coherent whole	Has some interesting touches, but lacks a distinct style Has some elements that may be excessive or do not fit together well	Is safe, ordinary, made in a conventional style Has several elements that do not fit together

21ST CENTURY RUBRICS FOR COOPERATIVE AND COLLABORATIVE LEARNING

Expectation	Reaching 4	Expanding 3	Developing 2	Entering/Beginning 1/0
Focus on Task and Participation	Consistently: -stays focused -works effectively with others	Usually: -stays focused -works effectively with others	Sometimes: -stays focused -works effectively with others	Rarely/Refuses: -stays focused -works effectively with others
Shared Responsibility and Dependability	Consistently: -follows through on task -evenly shares responsibility	Usually: -follows through on task -evenly shares responsibility	Sometimes: -follows through on task -evenly shares responsibility	Rarely/Refuses: -follows through on task -evenly shares responsibility
Listening, Questioning, and Discussing	Consistently & Respectfully: -listens, interacts, discusses and contributes to group	Usually: -listens, interacts, discusses and contributes to group	Sometimes: : -listens, interacts, discusses and contributes to group	Rarely/Refuse: -listens, interacts, discusses and contributes to group
Group/Partner Teamwork	Consistently: -make compromises -has a positive attitude -performs all duties and contributes to the group	Usually:: -make compromises -has a positive attitude -performs all duties and contributes to the group	Sometimes: -make compromises -has a positive attitude -performs all duties and contributes to the group	Rarely/Refuses: -make compromises -has a positive attitude -performs all duties and contributes to the group

21ST CENTURY RUBRICS FOR READING, WRITING, LISTENING AND SPEAKING

Reading for Understanding Rubric

Reading for Understanding Rubric				
Expectation	Reaching 4	Expanding 3	Developing 2	Entering/Beginning 1/0
Claim	Claiming is clearly stated and responds directly to the prompt/question. Claim shows complete comprehension of the passage and thorough understanding of the question in an insightful manner Includes the passage title, genre, author's name	Claim is stated, mostly responds to the prompt Claim demonstrates understanding of the question being asked Includes some, but not all relevant authorship information	The claim does not respond directly to the question but makes a reference to it Shows partial comprehension of the passage and the question that was asked Makes a passing reference to the author or passage title, but does not include all relevant specifics	There is no claim, or it is too difficult to understand. The response to the prompt is inadequate or confusing Does not refer to the author, title, genre
<u>Evidence</u>	pieces of perceptive evidence are used in the paragraph The evidence is strongly introduced and well-chosen to support the claim All evidence is properly cited (MLA)	pieces of perceptive evidence are used in the paragraph The evidence is introduced and adequately supports the claim Most evidence is properly cited (MLA)	Fewer than pieces of evidence are used in the paragraph The evidence may not support the claim and has not been carefully chose Makes a passing reference to the author or passage title, but does not include all relevant specifics	Evidence is referenced but not directly quoted, and does not provide usable support for the claim Evidence is not introduced Evidence is not correctly cited or citations are missing
<u>Analysis</u>	Analysis is insightful and demonstrates understanding of topic/text Fully explains how the evidence supports the claim Analysis follows each piece of evidence	Analysis demonstrates understanding of topic/text Mostly explains how the evidence supports the claim Analysis follows most pieces of evidence	There is an attempt to analysis There is little explanation of how the evidence supports the claim Not all evidence is analyzed	Analysis does not support the claim Explanation of the evidence is inadequate Analysis/Explanation is missing
Knowledge and Understanding	The response shows detailed knowledge and understanding of, and perceptive insight into, the text/work used for the assignment Insightfully responds to all aspects of the prompt w/analysis/explanation	The response shows knowledge and understanding of, and some insight into, the text/work used for the assignment Adequately explains all parts of the prompt	The response shows some knowledge but little insight or understanding of the text/work used for assignment	The response indicates a misreading of the material, or confusion with the content or question/prompt
Main Idea (Gist)	Most important who/what All important information about who/what In your words 10 or fewer words	Most important who/what Most important information about the who/what In your own words Between 11-15 words	Most important who/what may be unclear or not specific Some important information about the who/what Mostly in your own words Between 16-20 words	Most important who/what missing/incoherent Minimal important information about the who/what Somewhat in your own words may have too many quotes Over 20 words

WRITTEN/ARGUMENTATIVE RUBRIC

WRITTEN/ARGUNENTATIVE RODRIC					
Area/Standard	Reaching 4	Expanding 3	Developing 2	Entering/Beginning 1/0	Entering/Beginning 1/0
Focus/Claim	Insightfully addresses all aspects of the prompt	Competently addresses all aspects of the prompt	Superficially address all aspects of the prompt	Partially addresses aspects of the prompt	Minimally addresses some aspects of the prompt
	Introduces artful and precise claims(s) in a sophisticated thesis statement	Introduces precise, knowledge claims(s) in a clear thesis statement	Introduces reasonable claims(s) in a thesis statement	Introduces superficial or flawed claim(s) in a weak thesis statement	Fails to introduce a relevant claim and/or lacks a thesis
Organization Structure	Skillfully orients reader to topic(s) in introduction Thoughtfully develops claims(s)	Orients reader to topic(s) in introduction Develops claim\(s) with relevant	Partially orients reader to topic(s) in introduction Superficially develops claim(s)	Inadequately orients reader to topic(s) in introduction Inadequately develops	Fails to orient reader to topic(s) in introduction or introduction is missing
	with relevant body paragraphs	body paragraphs	with body paragraphs	claim(s(with minimal body paragraphs	Fails to develop claim(s) with body paragraphs
	Provides a meaningful and reflective conclusion which draws from and supports	Provides a conclusion that follows from and supports claim(s)	Provides a conclusion which repetitively or partially supports claim(s)	Provides an adequate conclusion	Omits conclusion
	claim(s) Creates cohesion through skillful use of linking words, phrases and clauses within and and between paragraphs	Creates cohesion through use of linking words, phrases, and clauses within and between paragraphs	Creates some cohesion through basic linking words, phrases, and clauses within and between paragraphs	Uses limited and/or inappropriate linking words, phrases, and clauses Includes uneven progression	Uses few or no transition/linking words, phrases, and clauses Includes little or no discernible organization of ideas
	Includes purposeful and logical progression of ideas from beginning to end	Includes logical progression of ideas from beginning to end	Includes adequate progression of ideas from beginning to end	of ideas from beginning to end	
Evidence/Suppor t	Provides substantial and pertinent evidence (4) to supports claims(s)	Provides sufficient (3) and relevant evidence to supports claim(s)	Provides limited (2) and/or superficial evidence to supports claim(s)	Provides minimal (1) and/or irrelevant evidence to support claim(s)	Provides inaccurate, little or no evidence to supports claim(s) Does not use or cite sources
	Seamlessly and effectively introduces and cites credible sources and/or text evidence	Competently introduces and cites credible sources and/or text evidence	Ineffectively introduces or cites credible sources and/or text evidence	Incorrectly introduces or cites sources and/or evidence that may not be credible	and/or text evidence Fails to acknowledge alternate or opposing claim(s)
	Convincingly refutes specific counterclaim(s)	Competently refutes specific counterclaim(s)	Minimally refutes specific counterclaim(s)	Acknowledges alternate or opposing claim(s)	opposing ciann(s)
Analysis	Shows insightful understanding of topic or text	Shows competent understanding of topic or text	Shows superficial understanding of topic or text	Shows limited and/or flawed understanding of topic or text	Shows no understanding of topic or text
	Uses persuasive and valid reasoning to connect evidence with claim(s)	Uses valid reasoning to connect evidence with claim(s)	Uses some valid and accurate reasoning to connect evidence with claim(s)	Uses limited, simplistic and/or flawed reasoning to connect evidence with claim(s)	Reasoning is missing or does not connect evidence with claim(s)
Language	Uses purposeful and varied sentence structures	Uses correct and varied sentence structures	Uses mostly correct varied sentence structure	Uses limited and/or repetitive sentence structure	Lacks sentence mastery (e.g. fragments/run-ons)
	Contains minimal (1) to no errors in conventions (grammar, punctuation, spelling, and capitalization)	Contains few (2-3) minor errors in conventions Competently uses academic and	Contains some (4-5) errors in conventions which may cause confusion	Contains numerous (6-7) errors in conventions which may cause confusion	Contains serious pervasive (8+) errors in conventions Fails to use academic or
	Strategically uses academic and domain-specific vocabulary clearly appropriate for the audience and purpose	domain-specific vocabulary clearly appropriate for the audience and purpose	Superficially uses academic and domain-specific vocabulary clearly appropriate for audience and purpose	Inadequately uses academic and domain-specific vocabulary	domain-specific vocabulary

GHS LISTENING SKILLS RUBRIC

	Reaching 4	Expanding 3	Developing 2	Beginning/Entering 1/0
Following Directions	Follows all single and multi-step directions with self-initiated requests for clarification, as appropriate	Follows all single and multi-step directions, rarely requires repetition or prompting	Misses several single and multi-step directions, requires some repetition or additional prompting	Routinely misses most single and multi-step directions, requires frequent repetition and/or prompting
Focusing on the Speaker	Focuses on the speaker as evidenced by constant, respectful and interested attention	Focuses on the speaker as evidenced by consistent and respectful attention	Sometimes loses focus on the speaker as evidenced by periods of brief, observable distraction	Often loses focus on the speaker as demonstrated by periods of observable distraction and/or disruptions
Applying or Responding to Spoken Information	Responds relevantly (orally or in writing) through notes, reflections, commentaries or summaries which enhance the discussion	Responds relevantly and adequately (orally or in writing) through notes, reflections, commentaries or summaries	Responds inadequately and/or partially (orally or in writing) due to poor active listening	Does not respond appropriately (orally or in writing) due to lack of active listening

ORAL PRESENTATION RUBRIC

Skills	Reaching (4)	Expanding (3)	Developing (2)	Beginning/Entering (1/0)
ТОРІС	Well focused topic w/ a well developed argument. Full understanding of the purpose of the presentation.	Focused topic w/ a developed argument. Understanding of the purpose of the presentation.	Lack of focused topic. Partially demonstrated understanding of the purpose of the presentation.	Lack of focused topic. Vague sense of purpose for the presentation. Requires the audience to make assumptions.
EVIDENCE	Clear and convincing command of facts and information. Insightful explanations that help to illustrate the speaker's ideas.	Clear use of facts and information. Partially developed explanations in support of the speaker's ideas.	Partially clear use of facts. Partially developed explanations in support of the speaker's ideas.	Limited or confusing use of facts and information. Limited or incomplete explanations to support the speaker's ideas.
ORGANIZATION	Clearly and logically organized presentation. Engaging introduction. Logically sequenced body w/ appropriate transitions. Clear and convincing conclusion.	Clear attempt at organization w/ a beginning, middle, and end. Obvious transitions and a conclusion.	Some inconsistencies in organization and/or a lack of sustained focus throughout the presentation. Inconsistent use of transitions and a conclusion.	Some organization but lack of focus. Inconsistent or no transitions. Difficult to follow or rambling Confusing or incoherent conclusion.
LANGUAGE	Uses sophisticated and varied language that is suited to the topic and audience. Word choice is concise, original, and effectively conveys the appropriate tone given the purpose of the presentation.	Uses appropriate language and word choice. Less sophistication, expressiveness and/or originality.	Words are suited to the topic, audience, and purpose. Lack conciseness, originality, and/or fails to convey an appropriate tone and/or purpose of the presentation. May be overly wordy and rambling.	Words may be unsuited/inappropriate for the topic, audience, or purpose of the presentation. Word choice lacks originality. Fails to convey an appropriate tone and purpose of the presentation.
SUPPORTING MATERIALS	Skillful use of supporting materials with no mistakes in conventions or spelling errors. Presentation is well designed and visually appealing, enhancing the effectiveness of the presenter.	Effective use of supporting materials with only a few (1-3) errors in conventions or spelling. Presentation shows some elements of design and visual appeal, and is fairly effective in supporting the presenter.	Attempted use of supporting materials with excessive (more than 3) errors in conventions or spelling. Design and visual appeal may not support the presenter. Supporting materials may contain too much or too little information.	Limited/No attempt to use supporting materials. Errors in conventions or spelling make the supporting materials difficult to follow. Design of the presentation is ineffective and lacks visual appeal. Supporting materials contain too much or too little information.
EFFECTIVE DELIVERY	A combination of appropriate eye contact, clarity, and projection of voice, tone and pace, and gestures significantly enhance the speaker's words. Speaker remains enthusiastic, audience attention is maintained, and the purpose of the presentation is achieved successfully. Time > 5 min & < 15	A combination of appropriate eye contact, clarity, and projection of voice, tone, and pace, and gestures but w/o the smoothness required of "Reaching". Speaker shows some enthusiasm, the audience is mostly engaged. The purpose of the presentation is mostly achieved. Time >not met	A combination of eye contact, clarity and projection of voice, tone, pace, and gestures, but inconsistent in delivery and somewhat halting. Speaker shows inconsistent enthusiasm, and the audience may lose interest. The purpose of the presentation may be partially achieved. Time >not met	Inconsistent use of/lack of eye contact, clarity, and projection of voice, tone and pace, and/or gestures that interrupt the flow of speech. May read too much from paper/notes. Speaker shows limited enthusiasm, and audience interest is not sustained. The purpose of the presentation is minimally achieved. Time > not met

SCHOOL COUNSELORS

The School Counselors at Gardner High School exist to help students understand themselves in light of their aptitudes, interests, and talents as indicated through testing, level performance, classroom lessons and counseling sessions. Our major objective is to assist each student in meeting appropriate academic and personal goals. To attain this, careful planning and cooperation on the part of parents, students and his/her counselor is essential.

Parents are encouraged to participate in parent meetings throughout the year for important information and to schedule appointments with counselors and/or teachers to ensure that each student is achieving the academic personal success available at Gardner High School. Please contact the student's counselor at 978-630-4066.

A packet explaining the college application process is available to juniors in the spring. Local scholarship packets are distributed to seniors in February of their senior year.

Students are advised to select the most challenging course program. Students who take full advantage of all opportunities available will realize the greatest success. Counselors meet frequently with students to discuss future plans and goals, proper course selection, school difficulties and other concerns that may interfere with school achievement.

GARDNER HIGH SCHOOL COUNSELOR CURRICULUM

The Gardner High School Counselor Department has created lessons and programs designed to expand a student's personal, social, academic and career skills and goals.

Grade 8

<u>Individual Learning Plans</u> - THE ILP is a strategic planning tool intended to help youth identify and achieve goals after high school. The ILP provides students opportunities for college and career development and exploration activities, and helps them choos high school courses that will prepare them to reach their postsecondary goals. Plans will be created through classroom and advisory lessons. Students will be setting academic and personal goals and will review these goals throughout the year.

PSAT Administration - All 8th grade students will take the PSAT exam at no charge to begin to prepare the student to be college & career ready.

Grade 9

<u>PSAT Administration</u> - All 9th grade students will take the PSAT exam at no charge to begin to prepare the student to be college & career ready.

Internet Safety - Students will understand what is appropriate, and safe, online behavior

<u>Skills, Values & Interests</u> - Students will complete inventories to discover what is important to them and what they are good at and how that connects with their future goals.

Reality Check - What job do students need in the future to support the lifestyle they want to have.

<u>Selecting Classes that are Best for Your Future</u> - Students will understand how to select the best classes for them to prepare for their plans after high school.

Grade 10

<u>College & Career</u> - Students will learn how to connect their skills, values and interests to a field of study (major) in college.

<u>Selecting Classes that are Best for Your Future</u> - Students will understand how to select the best classes for them to prepare for their plans after high school.

PSAT Prep - Students will receive an introduction to the PSAT as well as tips on doing well on it!

PSAT Administration - All 10th grade students will take the PSAT exam at no charge to begin to prepare them for the SAT.

<u>PSAT Understanding Your Results</u> - Students will be able to read their PSAT results report to understand how to improve their score when they take the SAT.

Grade 11

<u>College & Career</u> - Students will be able to select colleges or postgraduate training programs based on the fields of study (major) they want to pursue.

<u>Selecting Classes that are Best for Your Future</u> - Students will understand how to select the best classes for them to prepare for their plans after high school.

<u>PSAT Administration</u> - All 11th grade students will take the PSAT exam at no charge to begin to prepare them for the SAT.

<u>Accuplacer</u> - Students will be given the accuplacer to determine their readiness for college-level dual enrollment courses.

Grade 12

<u>College & Career</u> - Students complete Common Applications and state college applications online and receive assistance with writing a college essay.

<u>Financial Aid Awareness</u> - Students and parents will receive information regarding the process to apply for financial aid.

SAT Administration - All 12th grade students will take the SAT exam free of charge for college application purposes and to help determine if students are college & career ready.

ACADEMIC LEVELS AT GARDNER HIGH SCHOOL

Gardner High School sets high standards and expectations for all students at all levels. Every course is designed to provide students with the knowledge and high level skills needed for post-secondary education, technical training, and employment. College preparatory, honors, and advanced placement course levels are offered at Gardner High School, as well as college level dual enrollment classes for which students can fulfill graduation requirements while also earning college credit.

Courses at Gardner High School develop literacy skills and teach students to think critically analytically. Classes are designed to prepare students for challenging and rigorous post-secondary learning and training at two and four year colleges and universities, vocational institutes, and/or career apprenticeship. All courses are based on rigorous and relevant content, which follow the Massachusetts Curriculum Frameworks. Courses prepare students to demonstrate successful performance outcomes including proficiency on the Massachusetts comprehensive Assessment System (MCAS) and standardized entrance exams such as SAT, SAT subject tests, and ACT.

Course level placement for students is determined on an individual basis by examining data including assessments, teacher recommendations, grades, and other relevant information. Students must work with their parents and guidance counselors to plan a course of study over four years that will help them reach their highest potential in achieving their goals after high school.

Students must be aware that colleges, technical schools, and employers seek students who have completed a rigorous academic program. Therefore, students in all academic levels are expected to exhibit behaviors that lead to maximum learning within all content areas. Students must work independently, take responsibility for their learning, engage in the learning process, demonstrate time-management skills, utilize effective study skills, be inquisitive, practice problem solving strategies, use technology effectively, accept feedback, and persevere with difficult tasks.

Successful completion of courses taken at the levels described below, in addition to meeting graduation requirements, will enable students to meet the recommended prerequisites for admission to a college or university.

Students are encouraged to challenge themselves academically while at Gardner High School. Below is a list of courses offered at GHS for Honors and Advanced Placement (teacher recommendation and a final grade of 85 in a preceding course are suggested before enrolling in an Honors or Advanced Placement course).

Students who choose to take Advanced Placement courses are expected to take the AP exam in that subject. AP credit designation is contingent on taking the exam.

All students who register for an AP course will be expected to complete the course and take the AP exam or the AP level. If a student finds an AP class to be too challenging, they must drop the course in the first week, during the Add/Drop period. (If you don't complete the course in its entirety and take the AP exam, the college's students have applied to, will be notified). Students will receive Honors credit for the course.

Due to the small number of students who elect certain Advanced Placement (AP) courses, we may offer these selected courses every other year.

HONORS

Honors courses move at an accelerated pace, designed to extend and deepen study of a subject through class work and independent work on projects and research outside of class. Below is a list of honors courses offered at GHS.

English	Mathematics
Honors English (9-12)	Honors Geometry
	Honors Pre-Calculus
Science	Honors Algebra II
Advanced Chemistry (11-12)	Honor Statistics
Advanced Physics (11-12)	
Honors Biology (9-10)	
Honors Chemistry (10-12)	Social Studies
Honors Physics (10-12)	Honors Modern World History II (9)
Honors Anatomy & Physiology (11-12)	Honors US History I (10)
Honors Technology & Engineering	Honors US History II (11)

Foreign Language

Honors Spanish II, III, IV, V

Some MWCC and Online

Honors French II, III, IV, V

classes are designated
as Honors.

See page 74

ADVANCED PLACEMENT

Advanced Placement courses provide students an opportunity for learning that goes beyond just facts and figures. The rich course material, classroom discussions, and demanding assignments typical of AP courses will help students develop the content mastery and critical thinking skills expected of college students. In addition, AP helps students to develop better study habits, improve their writing skills, and sharpen their problem-solving abilities, skills vital to college success.

Who should take AP courses?

The AP courses are intended for students who wish to take college courses while in high school. The offerings are college courses, which follow world or national curricula. The course work is rigorous and the pace is intense.

The students must:

- Have demonstrated high achievement in previous courses in that subject area
- Be motivated to achieve
- Have a very strong work ethic
- Be able to work well independently
- Agree to take the National AP Exam

AP courses offered at Gardner High School are approved annually by the College Board. The process for approval involves a review of the course syllabus each year along with a review of textbooks, resources and materials that will be used by the classroom teacher.

All students who register for an AP course will be expected to complete the course and take the AP exam at the AP level. If a student finds an AP class to be too challenging, they must drop the course in the first week, during the Add/Drop period. (If you don't complete the course in its entirety and take the AP exam, students' transcripts will be changed, the colleges' students have applied to will be notified (if applicable), and students will receive honors weighted credit for the courses.)

Below is a list of Advanced Placement courses offered at GHS. due to the small number of students who elect certain Advanced Placement (AP) courses, we may offer these selected courses every other year

English	Social Studies
AP English Language & Composition	AP Human Geography
AP English Literature & Composition	AP World History
	AP US History
	AP US Government & Politics
g.:	Madhamadian

Science	<u> Mathematics</u>
AP Biology	AP Calculus AB
AP Physics II	AP Calculus BC
AP Chemistry	AP Statistics
AP Environmental Science	
Music	Art
AP Music Theory	AP Studio
	AP Photography

ADVANCED PLACEMENT DISTINCTION AWARD

In order to recognize our students who go "above and beyond" with challenging coursework and who contribute to their school and community, we have created the **Advanced Placement Distinction Award**. To be awarded this distinction at graduation, students must meet the following criteria:

- Receive passing grades in a minimum of 5 AP Courses during their four years of high school.
- Maintain good attendance; display good behavior; and present integrity and good citizenship
 when representing Gardner High School in the community (This will be reviewed by
 administration and guidance prior to receiving this award.)

**The Collegeboard charges an AP exam. There is a reduced fee for students on Free/Reduced Lunch..Many colleges offer credit to students who achieve a high score on the AP exam. Please refer to a college' website to read their AP credit policy as it varies from institution to institution.

EARLY COLLEGE DISTINCTION AWARD

In order to recognize our students who have participated in our Early College Program and who have challenged themselves with taking multiple college level courses during their junior and/or senior years, we have created the **Early College Distinction Award**. To be awarded this distinction at graduation, students must meet the following criteria:

- Receive passing grades and earn a minimum of 15 college credits, the equivalent of five college classes.
- Maintain good attendance; display good behavior; and present integrity and good citizenship
 when representing Gardner High School in the community (This will be reviewed by
 administration and guidance prior to receiving this award.)

GARDNER HIGH SCHOOL GRADUATION REQUIREMENTS

Full-year classes are worth 5 credits Half-year (semester) classes are worth 2.5 credits GHS Requirements may be different from State Universities Entrance Requirements Please refer to page 21

GRADUATION REQUIREMENTS

English	20
Mathematics	20
Science	15
Social Studies Including: W. History, US History I, US History II *AP Human Geography will satisfy the World History requirement. *Students enrolled in our Early College Program may receive permission from the principal to substitute certain social studies requirements while at MWCC. *Transfer students to GHS may receive permission from the principal to substitute certain Social Studies courses.	15
Health & Wellness	2.5
Fitness (*State requires 4th year component)	5
Unified Arts* The Arts* *Starting with the Class of 2025	5
25 hours of Community Service	1
Financial Literacy *Starting with Class of 2024	2.5
Electives	31.5
Total Credits	115
Successful completion of MCAS	

*<u>UNIFIED ARTS INCLUDES:</u>

Music, Art, Technology, and World Languages
ART CLASSES INCLUDE
All Music and Art Classes, Drama, Dance, Makerspace &
other approved art-related classes

MassCore description see page 20

GARDNER HIGH SCHOOL REQUIREMENTS FOR GRADE PROMOTION

All students must successfully complete a certain number of credits in order to be promoted to the next grade level

Promoted to Grade 10	25 credits including 5 credits in English and 5 credits in Math	
Promoted to Grade 11	55 credits	
Promoted to Grade 12	80 credits	
Graduation	115 credits	

Requirements for Post-Secondary Options

The following are suggested high school courses for a variety of post-secondary options:

Four Year College – Bachelor's Degree

English – four years

Math – three years – MA State Universities now require four years including Algebra 1, 2 and Geometry or Trigonometry including a math during your final year of high school

Science – three years – a fourth year is recommended for more competitive colleges

Social Studies – three years – Modern World, US History 1 and US History 2

Foreign Language – two years of the same language – three or four years is recommended for more competitive colleges

***If you are applying to an Art School, a portfolio of your work may be required

Engineering Majors

It is recommended that you complete the above coursework as well as:

Pre-Calculus is required and it is highly recommended you take Calculus for your math

Biology, Chemistry and Physics should be completed for your sciences

AP courses are highly recommended

Health Majors – Nursing, Physical and Occupational Therapy

It is recommended that you complete the above coursework as well as:

Pre-Calculus or Probability and Statistics for your math

Biology, Chemistry and Anatomy and Physiology for your sciences – Physics is helpful as well

Two Year College – Associate's Degree

Completion of the above coursework is recommended – most two year colleges do not require that a foreign language was completed in high school.

Two Year Technical Institutes and Schools

Completion of the above coursework is recommended – most two year colleges do not require that a foreign language was completed in high school, however, you should check with each individual's schools requirements.

Technology and Engineering is highly recommended as part of your science coursework.

GRADE 8 CLASSES

Gardner High School includes grades 8-12. Students in the 8th grade are required to take 7 classes which include: English, math, science, history, STEM and Physical Education 8. Courses taken in the 8th grade are not included on the high school transcript and do not count towards their grade 9-12 graduation requirements and grade point average.

Grade 8 students are allowed to take some high school elective classes, but do not receive high school credit for them. However, successful completion of the 1st level of a foreign language does serve as the prerequisite for the 2nd year of Spanish or French It does not, however, count towards the two years of foreign language required by four year colleges. Most students who successfully complete Algebra I in 8th grade will move on to Honors Geometry in grade 9. Grade 8 curriculum continues to prepare students for the MCAS 2.0 assessment which occurs in the spring of the school year.

Gardner High Schools offer honors level English Language Arts, Algebra 1, Science and Social Studies to 8th graders. This allows students to be challenged in a more rigorous class to prepare them for the honors and Advanced Placement levels in high school. The high school staff is looking forward to working with students and families throughout this process in order to create a schedule that meets the individual learning needs and interests of your child, while providing an appropriately challenging high school experience.

Good student habits in grade 8 are extremely important in the successful completion of grade 8. Student behavior, attendance, and grades are crucial factors in the preparation of becoming a responsible high school student. Parents are encouraged to communicate with teachers and use PlusPortals for grade information to be well informed of their child's progress.

In order to ensure that our students are ready and prepared for high school, students who are in 8th grade who fail two or more core classes (English, Math, Science, or Social Studies) will be asked to participate in a summer program (pending funding). Meetings with parents/guardians regarding possible retention in 8th grade will also be scheduled by our guidance department and will include the principal.

Please contact the grade 8 school counselor with any questions or concerns.

MassCore Massachusetts High School Program of Studies

English	4 Units*		
Mathematics	4 Units		
	Including the completion of Algebra II or completion of the integrated Math equivalent. All students are recommended to take a math course during their senior year.		
Science	3 Units of lab-based science		
	In June 2012, the Massachusetts Board of Higher Education (BHE) revised its admissions standards to count technology/engineering coursework based on academic standards and taken for science credit as meeting the science admission requirement.		
History/Social Studies	3 Units		
	Including US History and World History		
Foreign Language*	2 Units		
	Of the same language		
Physical Education	As required by law		
	State law (M.G.L., c. 71, s. 3) states: "Physical education shall be taught as a required subject in all grades for all students. Health can be integrated in Physical Education, science, or taught as a stand-alone course.		
The Arts**	1 Unit		
Additional Core Courses	5 Units		
	Business Education, Career & Technical Education (CTE), Health, Technology (e.g., computer science, desktop publishing, multimedia and web design), or any of the subjects above. Note: Most students majoring in CTE will take more than 5 units in a CTE program of study		
	22 Units - Is a minimum that students should take in high school		

Additional Learning Opportunities	Complete as many of the following as possible
	Advanced Placement (AP); Capstone or Senior Project; Dual Enrollment courses taken for both high school and college credit; Online courses; Service Learning; and Work-Based Learning

^{*}A unit represents a full academic year of study or its equivalent in a subject that covers all the standards contained in a specific Curriculum Framework.

**Students enrolled in a state-approved Career and Technical Education program of studies have the option of opting out of Foreign Language and Art and still fulfill MassCore MassCore is the recommended program of study that Massachusetts high school students need in order to be better prepared for college and a

fulfill MassCore. MassCore is the recommended program of study that Massachusetts high school students need in order to be better prepared for college and a career. Developed by a statewide advisory group from the K-12, higher education and business sectors, MassCore maintains flexibility for students and high schools while allowing districts to set additional graduation requirements. Courses included in MassCore should be rigorous, engaging, and based on appropriate Massachusetts Curriculum Frameworks high school level standards.

MASSACHUSETTS STATE UNIVERSITY SYSTEM AND UMASS MINIMUM ADMISSIONS REQUIREMENTS

The admissions standards for the state universities and UMass emphasize a strong academic high school background so that students enter college ready to learn. These standards represent minimum requirements; meeting them does not guarantee admission, since campus officials consider a wide range of factors in admissions decisions. Students shall have fulfilled all requirements for the high school diploma or its equivalent upon enrollment. It is important to note that admissions standards for the state's community colleges differ. Community colleges may admit any high school graduate or GED recipient.

Freshman Applicants

The admissions standards for freshmen applicants have two main parts:

- 1. 16 required academic courses
- 2. A minimum required grade point average (GPA) earned in college preparatory courses completed at the time of application.

Applicants must also submit an SAT or ACT score.

Academic Course Requirement

Sixteen* college preparatory courses distributed as follows are required (A course is equivalent to one full school year of study. Courses count toward the distribution only if passed.)

• Effective with the college freshman class-entering fall 2016, the number of required courses will be increased to 17 with the additional year of math.

Requirement for college freshman class entering...

Subject		
English	4 courses	
Mathematics	3 courses (Algebra I & II and Geometry or Trigonometry or comparable coursework	
	4 courses (Algebra I & II and Geometry or Trigonometry or comparable coursework including mathematics during the final year of high school	
Sciences	3 courses drawn from Natural Science and/or Physical Science and/or Technology/Engineering; including 2 courses with laboratory work): Technology/engineering courses must be designated as science courses (taken for science credit) by the high school	
	3 courses (drawn from Natural Science and/or Physical Science and/or Technology/Engineering), including 3 courses with laboratory work	
Social Studies	2 courses (including 1 course in US History	
Foreign Languages	2 courses (in a single language)	
Electives	2 courses (from the above subjects or from the Arts & Humanities or Computer Sciences)	

Minimum Required Grade Point Average (GPA)

The GPA must be achieved based on all college preparatory courses completed at the time of application and should be weighted for accelerated (Honors or Advanced Placement) courses. The recommended minimum weighted high school GPA is 3.0 for the four-year public campuses.

Sliding Scale (used when GPA is lower than the minimum required GPA)

If an applicant's GPA falls below 3.0, a sliding scale will apply. This scale should be used only when an applicant's GPA falls below the required 3.0 minimum for admission to the state universities or UMass.

State University GPA	University of Massachusetts GPA	
3.00	3.00	

SAT Scores

Applicants who meet the GPA requirement do not have to use the sliding scale for admission,k but still must submit SAT or ACT test scores for consideration if they are applying to a state university or UMass within three years of high school.

Scores on the new writing section of the SAT will not affect the sliding for freshman applicants to the Massachusetts state universities or to UMass at this time. The sliding scale, used in making admissions decisions for students with high school grade point averages falling below the required minimum, will continue to be based upon the combined critical reading (verbal) and math sections of the SAT.

Sliding Scale for Freshman Applicants to UMass

Weighted High School GPA	Combined SAT-I V&M Must Equal or Exceed (ACTG Equivalent in Italics)
2.51-2.99	950 (20)
2.51-2.50	990 (21)
2.31-2.40	1030 (22)
2.21-2.30	1070 (23)
2.11-2.20	1110 (24)
2.00-2.10	1150 (25)

NO APPLICANT WITH A HIGH SCHOOL GPA BELOW 2.00 MAY $\,$ BE ADMITTED TO A STATE UNIVERSITY OR UMASS CAMPUS

Sliding Scale for Freshman Applicants to a State University

Weighted High School GPA	Combined SAT-I V&M Must Equal or Exceed (ACTG Equivalent in Italics)
2.51-2.99	920 (19)
2.51-2.50	960 (20)
2.31-2.40	1000 (21)
2.21-2.30	1040 (22)
2.11-2.20	1080 (23)
2.00-2.10	1120 (24)

COURSE CHANGES

The selection of a student's schedule is a contract to be honored both by the students and school personnel. Counselors will consider a student's ability; a student's expressed career goals, and the graduation requirements of the school. The student must also acknowledge that the courses selected represent his/her preferred choice. NO subject should be chosen with the belief that a trial basis is possible. Changes are not encouraged during the school year. Some courses are offered only during alternating years. Student enrollment is considered when determining whether a course will be offered.

The add/drop period is during the first week of the first semester, and the first week of the second semester. Any requests for changes after the add/drop period must be approved by the Principal. Once scheduling is completed, changes are made only if there is a conflict in the student's schedule, if a course is eliminated, changed, or added or if a student fails a prerequisite course. Changes in course placement are extremely rare once the initial requests are complete. No preference changes will be allowed. Partial credit will be awarded for full year classes if a student withdraws at the end of the semester with a passing grade, with the discretion of the Principal.

Students who drop a class after October 1st of the school year and attend the class for one day will receive a withdrawal leave (W) on their transcript.

MARKING SYSTEM

60 is the lowest possible passing grade

HONOR ROLL

Honor Roll status is determined by the overall average provided there are no grades below 70, I's or F's. Students must pass four academic classes to obtain honor roll status.

Average of 80 or above - Honors Average of 85 or above - High Honors Average of 90 or above - Principals List

ELIGIBILITY FOR ALL EXTRACURRICULAR ACTIVITIES

A student must earn twenty-five (25) credits during the marking period preceding participation in order to remain eligible to participate. Fall participation is based upon earning twenty-five (25) credits using your final grade of the previous academic year. This is based upon final averages and/or attendance in school. Incoming freshmen are automatically eligible. Summer school credits can be counted if taken as makeup or to restore credit. Winter participation is based initially on first quarter grades, and then second quarter grades which come out during the season. Spring participation is based on second quarter grades released prior to the start of the season, and then third quarter grades released during the season.

NCAA (National Collegiate Athletic Association): If you plan on participating in intercollegiate athletics, please register with the NCAA at <u>www.ncaa.com</u> This should be done in the spring of your junior year or early fall of senior year.

GRADE POINT AVERAGE

The final grade for a course appears on the student's transcript. The transcript is a gauge of the student's work, effort, commitment and level of motivation. In formulating a first impression of you, employers, the military, post-secondary institutions, and scholarship committees will rely on the transcript.

The level of the courses a student chooses affects their GPA and class rank, a critical item for college admissions and scholarship awards. The higher the course is weighted, the more it will contribute to your class rank and weighted GPA. Class ranks are always a weighted rank. UE classes are not weighted and have no bearing in class rank or the weighted GPA. Transcripts **may** have both a weighted and unweighted GPA and a weighted class rank. GPA and Class Ranks are calculated at the end of the school year.

COURSE WEIGHTING:

Advanced Placement 1.3	Honors 1.15	Dual Enrollment Classes All credit bearing 1.15	College Prep 1	UE (unweighted electives Counts in simple GPA but not in weighted
---------------------------	----------------	---	-------------------	---

Weighted GPA and class rank will be used to determine the class valedictorian and salutatorian at the end of the 4th term senior year.

VALEDICTORIAN/SALUTATORIAN

To be considered eligible for Valedictorian or Salutatorian of a graduating class, a student must attend Gardner High School for a minimum of four (4) semesters.

The Gardner High School Visual Arts Program electives provide students with the opportunity to discover and develop individual creative expression, appreciation and understanding. Studio assignments and assessments encourage students to develop skills in drawing, printing, ceramics, sculpture, crafts and commercial art. Art History and Multicultural studies expand student awareness and appreciation for the visual arts.

ART I: This is a full year beginning art class that touches on a variety of art forms and techniques. Students will acquire various artistic skills and apply these skills to develop their own creative "voice". The Elements of Art will be explored through basic drawing, painting, printmaking and design as well as sculpture and cultural influences. A basic study of art history will give important background information and meaning to classroom projects students explore artistic possibilities.

Expectations for Student Learning: Students will demonstrate creativity.

Grade: 9-12 Credits: 2.5	Level: College Preparatory	Course#: 532
--------------------------	----------------------------	--------------

ART II: This is a full-year course intended for motivated students as they enhance and improve their own artistic style or "voice". Students will experience and explore new areas of study and media as they apply a more developed skill level in the production of their artistic work. They will choose a "theme" as an underlying focus of their work to unify and give meaning to their portfolio. Students will study the art movement and their influences on the art we experience today. The students will also experience a sampling of murals, fabric design, interior design and mixed media during the course.

Prerequisite: Successful completion of Art I or equivalent or written permission of instructor.

Expectations for Student Learning: Students will demonstrate creativity.

Grade: 9-12 Cr

ART III: This full year course is intended for highly motivated students to prepare Art portfolios for college, advanced placement, and personal development. This class is intended for students who wish to explore and experience new areas of study and media by applying these in a creative manner as a form of personal expression and development of a unique personal style. Work from this class may also be included in the breadth section of the AP Portfolio.

Prerequisite: Successful completion of Art II or equivalent or written permission of instructor.

Expectations for Student Learning: Students will demonstrate creativity.

	Grade: 10-12	Credits: 2.5	Level: College Preparatory	Course#: 5549	
- 1					

ART IV: This full year course is intended for highly motivated students to prepare portfolios for college, advanced placement, and personal development. Students will explore and experience new areas of study and media by applying these in a creative manner as a form of personal expression. Students will have the opportunity to apply acquired skills and techniques in their

creation of high imaginative artwork that demonstrates ability to solve and to"think outside the box". Students in this class will have input as to the direction of this class and production of work.

Prerequisite: Successful completion of Art III or written permission of instructor.

Expectations for Student Learning: Students will demonstrate creativity.

Grade: 10-12	Credits: 2.5	Level: College Preparatory	Course#: 550

ADVANCED PLACEMENT STUDIO ART: This is a full year course that is designed for those who demonstrate a strong proficiency in multiple art mediums (Drawing, 3-D, and non-photography 2-D). The course is designed for a personal expression through eight to twelve (8-12) completed works that will contribute to the AP portfolio requirements meant to be submitted in May. During the creation period, students should understand the art process and be trying to display their creative expression and specific art style. Art works should show evidence of synthesis of materials, processes, and ideation. The final submission of your portfolio (to be submitted online) will consist of fifteen (15) detail/ process images of work, and five (5) physical works of your choosing. Upon completion and passing of this AP course the student will gain college credit. In addition to the coursework, there is summer work that needs to be completed prior to the beginning of the school year, and any student who does not complete this work may be withdrawn from the course.

There is a reduced cost for students on free/reduced lunch. Many colleges offer credit to students who achieve a passing score on the AP exam. Students who enroll in this course must take the AP exam.

Expectations for Student Learning: Students will demonstrate creativity.

Grade: 11-12 Credits: 5	Level: Advanced Placement	Course#: 510
-------------------------	---------------------------	--------------

ADVANCED PLACEMENT DIGITAL PHOTOGRAPHY: This is a full year course that is designed for those who demonstrate a strong proficiency in digital photography/2-D design. The course is designed for a personal expression through eight to twelve (8-12) completed works that will contribute to the AP portfolio requirements meant to be submitted in May. During the creation period, students should understand the art process and be trying to display their creative expression and specific art style. Art works should show evidence of synthesis of materials, processes, and ideation. The final submission of your portfolio (to be submitted online) should consist of fifteen (15) detail/ process images of work, and five (5) physical works of your choosing. Upon completion and passing of this AP course the student will gain college credit. In addition to the coursework, there is summer work that needs to be completed prior to the beginning of the school year, and any student who does not complete this work may be withdrawn from the course.

There is a reduced cost for students on free/reduced lunch. Many colleges offer credit to students who achieve a passing score on the AP exam. Students who enroll in this course must take the AP exam.

Expectations for Student Learning: Students will demonstrate creativity.

Grade: 11-12 Credits: 5	Level: Advanced Placement	Course#: 502
-------------------------	---------------------------	--------------

CERAMICS I: This class is designed for students who have an interest in working with clay, and gives students experiences in making functional as well as sculptural pieces, using a variety of techniques. As a basic course the emphasis is on hand-building construction, design, aesthetics, and the creative development of clay objects examining cultural, historical and personal modes

of expression. Upon completion of this course, the students should be able to perform the three hand-building techniques, glazing and firing methods, and apply design concepts in creating ceramic forms.

Expectations for Student Learning: Students will demonstrate creativity.

Grade: 9-12 Credits: 2.5	Level: College Preparatory	Course#: 511
--------------------------	----------------------------	--------------

<u>ADVANCED CERAMICS</u>: This is an advanced course which builds on and further explores the traditional hand-building techniques through larger size and in-depth study of organic and biomorphic form. After using the three basic hand-building techniques of pinch, coil, and slab students will choose a theme to begin to develop their own person style. Historically based projects will reinforce the deeper study of the history of art and ceramics.

Prerequisite: Successful completion of Ceramics I or written permission of instructor.

Expectations for Student Learning: Students will demonstrate creativity.

Grade: 9-12	Credits: 2.5	Level: College Preparatory	Course#: 520
--------------------	--------------	----------------------------	--------------

DRAWING: Introduction to Drawing is a foundation studio elective that will expose students to basic concepts, themes and materials of drawing. Drawing will teach the elements of art and principles of design. Students will use a variety of media including pencil, pen, charcoal, ink and pastel. Students will be drawing from observation; subjects to be studies will be gesture drawing, still life, contour and perspective drawing.

Expectations for Student Learning: Students will demonstrate creativity.

Grade: 9-12 Cred	dits: 2.5 Level: College Preparator	cy Course#: 517
------------------	-------------------------------------	-----------------

PAINTING: Students will focus on techniques and mechanics while painting a variety of media, including watercolor, tempera, gouache, and acrylic. Projects will be based on the elements of Art and principles of design through the use of such themes as landscape, still life, portraits, and color theory.

Basic Learning Competencies:

- Create works using organizational principles and functions to solve specific visual arts problems.
- Create artwork demonstrating a purposeful use of the elements and principles to convey meaning and emotion.

Expectations for Student Learning: Students will demonstrate creativity.

Grade: 9-12 Credits: 2.5	Level: College Preparatory	Course#: 528
--------------------------	----------------------------	--------------

<u>DIGITAL PHOTOGRAPHY</u>: In this semester course, you will use digital cameras to learn how to compose better pictures, transfer photos from your camera to a computer, crop, retouch, modify images, correct color balance, organize your photos, eliminate red eye, scan images, and make photo presentations. Students will have the opportunity to have their photographic work published in the school yearbook and local newspaper. This course provides an introduction to

"Photoshop CS3", a powerful software application that allows you to use filters, effects and layers to enhance your photos and create digital art.

Expectations for Student Learning: Students will think critically, listen actively and utilize technology effectively.

Grade: 9-12 Credits: 2.5	Level: College Preparatory	Course#: 653
--------------------------	----------------------------	--------------

ADVANCED DIGITAL PHOTOGRAPHY: In this course, you will build upon previous experiences in Digital Photography. Hands on activities relating to portraiture, nature photography, and natural light and flash photography will enhance your understanding of composition and exposure, which will allow you to create quality photographs. Students will have the opportunity to have their photographic work published in the school yearbook and local newspaper. This course also uses "Photoshop CS3" to enhance your photos and create digital art.

Prerequisite: Successful completion of Digital Photography and/or written permission of instructor.

Expectations for Student Learning: Students will think critically, listen actively and utilize technology effectively.

Grade: 9-12 Credits: 2.5	Level: College Preparatory	Course#: 638
--------------------------	----------------------------	--------------

The principles stated in the Common Core State Standards are the guiding principles of the English curriculum at Gardner High School. These guiding principles include the following areas of Language, Literature, Composition and Media.

ENGLISH 9: The reading content of this course will introduce the student to the works of various authors to include a survey of world and American literature. The writing component will emphasize the writing process, and students will focus primarily on argumentative/analytical as well as narrative compositions. Critical thinking skills as well as practice in responding to open-ended questions will be stressed in preparation for the MCAS. Vocabulary development and application of literary concepts will be incorporated into the literature instruction.

Expectations for Student Learning: Students will read and write effectively.

Grade 9	Credits: 5	Levels: Honors	Course#: 011
		College Preparatory	012

ENGLISH 10: This full year course focuses on the continued development of critical thinking skills through the exploration of American and world literature. Standards based curriculum units center on the preparation for the Next Generation MCAS exam. Each unit helps to develop the writing process for all types of writing including those featured on the MCAS exam such as narrative, persuasive, and analytical writing. Language and vocabulary development are embedded into each curriculum unit. This course encourages curiosity and question asking while building upon students' reading and writing skills via the literary genres of the novel, short story, essay, poetry, and drama.

Expectations for Student Learning: Students will read and write effectively.

Grade 10 Credits: 5	Levels: Honors College Preparatory	Course#: 021 022
---------------------	---------------------------------------	---------------------

ENGLISH 11: This full-year course continues To refine writing, reading and analytical skills. The course covers the analysis and critical study of representative works in American literature. Additionally, research techniques and presentation, grammar and usage, SAT preparation, media literacy, vocabulary, and various types of writing are taught and studied. A research paper will be a major component of this year of study.

Expectations for Student Learning: Students will read and write effectively.

College Preparatory 032

ENGLISH 12: The reading content of this course will consist of classical and modern world literature in poetry and prose. The aim is to prepare students for a liberal education with a wide variety of literature in both fiction and nonfiction. The writing

component will emphasize effective expression, proper spelling, usage and refinement of individual skills. Organizational and critical thinking skills will be stressed in written assignments and oral discussion of the reading. Vocabulary development, critical analysis and the application of literary concepts will be incorporated into the literature instruction.

Expectations for Student Learning: Students will read and write effectively.

	Grade 12	Credits: 5	Levels: Honors	Course#: 041
ı			College Preparatory	042

ENG 101. COLLEGE WRITING I: Students will develop college-level English writing skills with an emphasis on the writing process, an awareness of purpose and audience, and an understanding of grammar, punctuation, and sentence structure. Reading selections will foster improved writing skills and critical and analytical thinking. By semester's end, students will have produced at least four essays totaling 12-15 pages of original, polished prose, as well as additional writing in varied forms, such as journals, free-writes, peer review, reading responses, and rough drafts. Students are required to successfully complete the MWCC Library Research Skills MOOC and will write at least one paper that incorporates outside source material. Working with an instruction librarian on the research project is encouraged.

Prerequisites: ENG 098, RDG 098, or placement.

Grade: 11-12	Credits: 5	Level: Honors	Course#: 043
1			

ENG 102. COLLEGE WRITING II: Writing about literary works will improve student writing, revision, critical thinking, and reading skills. The readings will be selected from a range of texts including fiction, non-fiction, poetry and drama. Evaluation and analysis will be accomplished through a variety of writing assignments, for example, discussion board posts, in-class writing, journals, free-writing, essay exams, and rough drafts of formal essays. By semester's end, students will have produced several pieces of writing totaling 12-15 pages of original, polished prose. At least one of the essays will incorporate library research that is cited and documented appropriately.

Prerequisite: ENG 101

Grade: 11-12 Credits: 5 Level: Honors Course#: 044
--

ADVANCED PLACEMENT ENGLISH LANGUAGE AND COMPOSITION: This full-year course includes both reading and analysis of complex prose from various authors and periods with emphasis on nonfiction. The study of various types of discourse and active class participation are essential elements of this course. Students will engage in various writing experiences calling for the use of different styles, tone, and syntax. Through such study and practice, students will gain an understanding of the principles of effective writing and become proficient writers themselves. Students are required to take the official AP exam at the end of the year. With successful performance in the AP exam, up to one semester of college credit in an English Composition class may be granted from accepting colleges. Summer work is a mandatory part of this course.

There is a reduced cost for students on free/reduced lunch. Many colleges offer credit to students who achieve a passing score on the AP exam. **Students who enroll in this course must take the AP exam.**

Expectations for Student Learning: Students will read and write effectively.

Grade 11	Credits: 5	Levels: Advanced Placement	Course#: 050
----------	------------	-------------------------------	--------------

There is a reduced cost for students on free/reduced lunch. Many colleges offer credit to students who achieve a passing score on the AP exam. Students who enroll in this course must take the AP exam.

ADVANCED PLACEMENT ENGLISH LITERATURE AND COMPOSITION: This full-year English course guides the student through classics of literature, poetry, and drama, which are considered the foundational basis of a liberal education. The student is taught in-depth close reading and critical analysis, not as an end in itself but as a useful tool in the study of the literature of life. Students are encouraged to expand their thinking processes with continued curiosity and question asking in the classroom. Students are expected to take an active and reflective role in class discussion of literature. As the students' literary and critical faculties are more clearly defined, they are encouraged to polish and refine their own style of writing.

Students are required to take the official AP exam at the end of the year. With successful performance on the AP exam, up to one semester of college credit in an English Composition class may be granted from accepting colleges. There is a reduced cost for students on free/reduced lunch. <u>Summer work is a mandatory part of this course</u>.

Expectations for Student Learning: Students will read and write effectively at an advanced level of study.

Grade 11-12	Credits: 5	Levels: Advanced Placement	Course#: 040

SCIENCE FICTION LITERATURE AND FILM: This course is designed to increase students' knowledge of the literary genre known as Science Fiction. Emphasis will be on the study of literature and film that show our possible future worlds and conflicts between humans, aliens, and technology. Students will study history and relevant issues in Science Fiction, including dystopia vs. utopia, artificial intelligence, and current theories concerning technology, cloning, and human psychology in a futuristic environment.

Expectations for Student Learning: Students will read and write effectively.

Grade 8-12	Credits: 2.5	Levels: College Preparatory	Course#: 1206
------------	--------------	-----------------------------	---------------

FEAR AND HORROR IN FICTION: This course explores the fiction of the fantastic, the magical, the supernatural, and the horrific, including vampires, zombies, werewolves, and other frightening creatures. It also explores what it is about horror and fear that we are so drawn to, and how creators of horror play on our fears about the world and ourselves in order to make us think about important issues.

Expectations for Student Learning: Students will read and write effectively.

Grade 8-12 Credits: 2.5	Levels: College Preparatory	Course#:	1001	l
-------------------------	-----------------------------	----------	------	---

<u>LITERATURE OF ANIMATION</u>: This course is designed to increase students' ability to analyze stories using animated films. Emphasis will be on exploring aspects of short story (characterization, setting, conflict) and identifying literary

devices (point of view, symbols, theme) to examine stories and make connections to other mediums and real life experiences.

Expectations for Student Learning: Students will read and write effectively.

MYTHOLOGY: This semester course will focus on examining the gods, heroes and monsters of Greek mythology. Using both classic and modern stories, we will learn about the Olympians and investigate themes such as explaining natural phenomena, the quests and struggles of both immortals and mortals, and the role of fate. The course is designed for anyone who would like an introduction to Greek mythology and a look at its lasting influence.

The Foreign Language Department at Gardner High School offers multiple levels of instruction in French, Spanish and Latin. These courses are standards-based and comply with the Massachusetts Curriculum Frameworks. Our program promotes a balanced instructional program that develops speaking, listening, reading and writing skills as well as reading comprehension. The students will develop knowledge of literature, history and culture.

FRENCH I: This full-year course is an introduction to the French language and culture. Its emphasis is on the skills of listening comprehension and speaking. This is accomplished by oral and written practice of modern, everyday language and the use of selected audio-visual materials. Students will learn thematic vocabulary focusing on everyday needs and activities as they learn to communicate orally, and in writing.

This course is not intended for native speakers of the target language. Native speakers are encouraged to enroll in an upper level course or to pursue instruction in a new language.

Expectation for Student Learning: Students will listen actively and communicate effectively.

Grade: 8-12	Credits: 5	Levels: College Preparatory	Course#: 411

FRENCH II: This full-year course students will continue to increase their proficiency in the skills of listening comprehension and speaking. Students will also focus on reading and writing in communication topics of interest in the past, present and future. Students will study aspects of the Francophone world.

This course is not intended for native speakers of the target language. Native speakers are encouraged to enroll in an upper level course or to pursue instruction in a new language.

Prerequisite: Successful completion of French I or written permission of instructor.

Expectation for Student Learning: Students will listen actively and communicate effectively.

Gra	ade: 9-12	Credits: 5	Levels: Honors	Course#: 443
			College Preparatory	412

FRENCH III: This full-year course of French, taught in the target language, is intended for students who have developed basic skills to a functional degree allowing for individual expression and some extensive reading. Continued development of skills includes review and advanced study of the structure of the language. Reading and cultural material emphasize the contemporary scene in terms of the historical, social and aesthetic development of the people.

Prerequisite: Successful completion of French II or written permission of instructor.

Expectation for Student Learning: Students will listen actively and communicate effectively.

Grade: 9-12	Credits: 5	Levels: Honors	Course#: 453
-------------	------------	----------------	--------------

FRENCH IV: this full-year course of French is recommended for the highly motivated student upon recommendation of the instructor. The content will vary depending on the ability and interests of the students. Emphasis will be placed on one or more of these areas: language, literature, culture.

Prerequisite: Successful completion of French III or written permission of instructor.

Expectation for Student Learning: Students will listen actively and communicate effectively.

Grade: 9-12	Credits: 5	Levels: Honors	Course#: 450

FRENCH V: This full-year course is taught exclusively in the target language. It is designed to provide highly motivated students with the ability to use spoken and written language in a wide variety of situations. Target language readings consists of newspapers, magazine articles as well as authentic literary texts. Students will discuss current events and examine and analyze cultural contributions of significant people and events in history. Throughout this course students will communicate both orally and in writing, with increasing fluency and accuracy.

Prerequisite: Successful completion of French IV or written permission of instructor.

Expectation for Student Learning: Students will listen actively and communicate effectively.

Grade: 9-12	Credits: 5	Levels: Honors	Course#: 450

SPANISH I: This full-year course of Spanish introduces the student to the basic elements of the four basic skills: listening, speaking, reading and writing. Development of these skills is attained by oral and written practice of modern, everyday language and the use of selected audio-video materials. The student also acquires basic skills in reading and cultural concepts concerning everyday life in Spanish speaking countries.

This course is not intended for native speakers of the target language. Native speakers are encouraged to enroll in an upper level course or to pursue instruction in a new language.

Expectation for Student Learning: Students will listen actively and communicate effectively.

Grade: 8-12	Credits: 5	Levels: College Preparatory	Course#: 421

SPANISH II: This full-year course of Spanish reviews the basic principles of the first year of Spanish. It expands on the four skills of listening, speaking, reading and writing, and deals with the various types of Spanish literature.

Prerequisite: Successful completion of Spanish I or written permission of instructor.

This course is not intended for native speakers of the target language. Native speakers are encouraged to enroll in an upper level course or to pursue instruction in a new language.

Expectation for Student Learning: Students will listen actively and communicate effectively.

Grade: 9-12	Credits: 5	Levels: Honors	Course#: 435
		College Preparatory	422

SPANISH III: At this level the students continue to increase their ability to understand and speak the Spanish language. Throughout this course the students will incorporate more complex grammar structures and increase their vocabulary by reading, writing, listening and speaking Spanish in the classroom. Emphasis will be given to communication, both orally and in writing. Students will also explore the geography, history and culture of Spanish-speaking countries around the world. Most classroom business will be conducted in Spanish.

Prerequisite: Successful completion of Spanish I or written permission of instructor.

Expectation for Student Learning: Students will listen actively and communicate effectively.

Grade: 9-12	Credits: 5	Levels: Honors	Course#: 451

SPANISH IV: This course students will further define their communicative and grammatical skills as they explore various themes through authentic materials. Students will read, view, and interpret various works in Spanish. More emphasis will be given to reading, writing and speaking. Students will explore ancient civilizations and cultures of the Spanish-speaking world as well as contemporary trends of the Spanish-speaking population in and outside of the United States. Spanish will be used extensively during class.

Prerequisite: Successful completion of Spanish III or written permission of instructor.

Expectation for Student Learning: Students will listen actively and communicate effectively.

Grade: 9-12	Credits: 5	Levels: Honors	Course#: 459

SPANISH V: This full-year course is taught exclusively in the target language. It is designed to provide highly motivated students with the ability to use spoken and written Spanish in a wide variety of situations. Readings such as newspapers, magazines as well as authentic literary texts will be used to help students to further develop their language skills. Students will discuss current events and examine and analyze cultural contributions of significant people and events in history. Throughout this course students will communicate both orally and in writing with fluency and accuracy.

Prerequisite: Successful completion of Spanish IV or written permission of instructor.

Expectation for Student Learning: Students will listen actively and communicate effectively.

Grade: 9-12	Credits: 5	Levels: Honors	Course#: 458

<u>WELLNESS I</u>: This required course will focus on developing the key health skills to help us become socially and emotionally healthy. Skills will be practiced through discussions, projects, games, role plays and Project Adventure activities. Topics will include mental health, suicide prevention, interpersonal communication, nutrition, stress management, prescription drug abuse, reproductive health, body image and gender identity.

Expectations for Student Learning: Students will problem solve effectively and think critically. Students will work collaboratively and improve communication skills.

Grade: 9-12 Credits: 2.5	Level: College Preparatory	Course#: 703
--------------------------	----------------------------	--------------

WELLNESS II: Wellness II focuses on helping students take control and responsibility of their health as they near adulthood. Students will engage in real-life scenarios that will enable them to practice complex decision making and advocacy. Topics will include advanced reproductive health, utilizing health services (including specialists, local, regional and national organizations), medical terminology, family and community emergencies and disease prevention. Students will also participate in lifelong fitness activities. If possible, we will travel to MWCC Fitness and Wellness Center on a regular basis. In addition, the Gardner police will provide an education component regarding drug/alcohol abuse which focuses on drinking and driving. Participants in this Health and Wellness course will participate in the American Heart Association First Aid and CPR Training. Students will have the option to become certified in First Aid/AED for a small fee.

Expectations for Student Learning: Students will problem solve effectively and think critically. Students will work collaboratively and improve communication skills.

Grade: 10-12	Credits: 2.5	Level: College Preparatory	Course#: 712
--------------	--------------	----------------------------	--------------

THE CENTERED SELF: This is a stress management course which cultivates self-awareness, confidence, assertiveness and personal growth to better manage the demands of school and life. Students will learn about stress, its causes and effects and how it impacts wellness. We will practice a wide range of stress management and relaxation techniques that will include deep breathing, progressive muscle relaxation, meditation, and mindfulness. We will also participate in self-defence, first aid and CPR, physical activities, analyze how our diets affect our stress levels and develop time management strategies to help cope with the pressures of school.

Expectations for Student Learning: Students will problem solve effectively and think critically. Students will work collaboratively and improve communication skills.

Grade 9-12	Credits: 2.5	Levels: College Preparatory	Course#: 714

NUTRITION: This class focuses on helping you take control and responsibility of your dietary choices as you near adulthood. After learning the fundamentals of a healthy diet, you will study many current issues in nutrition and the food industry. You will examine how advertising influences your food choices and how these decisions may lead to chronic and degenerative diseases. You will compare the Standard American Diet to those of "Blue Zones" where people live long, disease free lives. Other topics will include: farming practices, fad diets, diets for athletes, meal planning and designing a food budget. Throughout the course, you will be examining your own eating habits, participating in food challenges and creating a model diet that will provide you with a foundation for optimal health and well-being. Be prepared to help prepare healthy, plant based recipes once per month as well as working in the school garden!

Expectations for Student Learning: Students will problem solve effectively and think critically. Students will work collaboratively and improve communication skills.

Grade: 9-12	Credits: 2.5	Level: College Preparatory	Course#: 706
--------------------	--------------	----------------------------	--------------

DANCE EXPLORATION: This semester's course is designed to keep the body moving. Students will explore many dances including ballet, jazz, folk dances and many different modern routines. Students will be encouraged to choreograph and teach to the rest of the class, participate in others' routines, with the goal that we keep moving each day. This course is open to all levels of dance from beginner to advanced.

This class can be used as an Unified Art credit.

Expectations for Student Learning: Students will problem solve effectively and think critically. Students will work collaboratively and improve communication skills.

Grade: 8-12 Credits: 2.5	Level: College Preparatory	Course#: 545
--------------------------	----------------------------	--------------

<u>UNIFIED PHYSICAL EDUCATION:</u> This course brings together students with and without disabilities for physical activities and sports, with the goal of enhancing the physical, intellectual and social growth of all. This class focuses on increasing physical fitness and sport-specific skills, rules, and strategies, as well as reinforcing positive habits and reasoning to make better health and lifestyle choices.

Expectations for Student Learning: Students will problem solve effectively and think critically. Students will work collaboratively and improve communication skills.

Grade: 8-12 Credits: 2.5	Level: College Preparatory	Course#: 709
--------------------------	----------------------------	--------------

OUTDOOR ADVENTURES is a fun and exciting elective course that covers physical education requirements. Students are taught lifelong skills through the integration of physical education, science, wildlife conservation, art and critical thinking. The focus is on being outdoors, participating in activities such as: challenge skills, hiking, plant identification, survival techniques, tracking, camping, trip planning and fort

building. This class is designed to change young people's lives forever by exposing them to the Great Outdoors and its many physical and social opportunities.

Expectations for Student Learning: Students will problem solve effectively and think critically. Students will work collaboratively and improve communication skills.

Grade: 8-12 Credits: 2.5	Level: College Preparatory	Course#: 732
--------------------------	----------------------------	--------------

PERSONAL FITNESS This course will cover a Physical Education requirement and is based on the four aspects of Physical Fitness: Cardiorespiratory Fitness, Muscle Fitness, Flexibility, and Body Composition. Students will design their own personal workout programs and the majority of class time will be spent exercising according to these personal plans. Students will apply systematic aerobic conditioning concepts to find heart rate training zones and F.I.T. (frequency, intensity, and time) measures for their cardio respiratory plans. Students will learn and apply many muscle fitness principles and will also employ the F.I.T. measures for their personal program goals. students will also have the unique opportunity to train for specific sports, activities, races, and other activities. We will use the Fitness Center, including cardio machines, free standing weight machines, stability balls, weight balls, bosu trainers, and resistance tubes. The weight room will also be used, including the multi station machine, free weights and free standing weight machines. This is a participation course and promotes learning through physical performance of learned skills and techniques.

Expectations for Student Learning: Students will problem solve effectively and think critically. Students will work collaboratively and improve communication skills.

Grade: 8-12	Credits: 2.5	Level: College Preparatory	Course#: 733
--------------------	--------------	----------------------------	--------------

TEAM SPORTS: Will cover a Physical Education requirement and will include instruction of skills and active participation in a variety of sports and physical activities. Some of the sports and activities offered in this course will include: basketball, volleyball, pickleball, badminton, soccer, capture the flag, speedball, futsal, flag football, and a variety of other team centered games. This is a participation course that promotes respect, healthy competition, sportsmanship and cooperation. Emphasis is also placed on the physical performance of learned skills and various approaches to the game.

Expectations for Student Learning: Students will problem solve effectively and think critically. Students will work collaboratively and improve communication skills.

Grade: 8-12	Credits: 2.5	Level: College Preparatory	Course#: 734
--------------------	--------------	----------------------------	--------------

MATHEMATICS

The Mathematics Department of Gardner High School offers a variety of standards-based courses, which comply with the requirements of the Massachusetts Curriculum Frameworks. Our goal is to improve the ability of our students to investigate and problem solve. Numerical, analytical and geometrical approaches are used to develop mathematical thought and emphasis is placed on verbal and written communication.

The table below provides a guide for suggested routes of study to complete 4 years of math at GHS. Course selection should be made by using input from the student, the parents, the teacher and the guidance counselor.

9th Grade	Algebra I, or Honors Geometry and Honors Algebra II
10th Grade	Algebra II w/Enrichment, Honors Algebra II and H Geometry, or Honors Precalculus
11th Grade	Geometry Advanced Algebra and Trigonometry Honors Precalculus Honors Statistics AP Calculus AB
12th Grade	Math Modeling AP Calculus AB CP Statistics/Probability AP Statistics Advanced Algebra and Trigonometry Advanced Placement Calculus BC Honors Statistics

ALGEBRA I: This course begins with a review of pre-algebra skills such as using variables, exponents, the order of operations, and tables & graphs. The remainder of the course will focus on operations with equations, inequalities, lines, and functions. It will also provide the opportunity for students to use data to find and display measures of central tendencies. Students studying at the college prep level will work at grade level pace, with an emphasis on the application of skills and justification of the steps in the problem solving process. They will investigate topics in depth with emphasis on critical thinking skills and applied problem-solving. Assessments are designed to evaluate students' ability to synthesize information according to Bloom's taxonomy.

Expectations for Student Learning: Students will problem solve effectively and think critically.

Grade: 9-12 Credits: 5	Level: College Preparatory	Course#: 112
------------------------	----------------------------	--------------

GEOMETRY: This course begins with a brief review of algebra skills: such as solving equations, polynomials, and factoring. The remainder of the course is devoted entirely to geometry. Aspects of geometry

that will be explored include: inductive and deductive reasoning with simple proof statements, lines, angles, polygons, circles, solids, congruence and similarity. Students studying at the honors level will work at an accelerated pace. They will investigate topics in depth with emphasis on critical thinking skills and applied problem-solving. Assessments are designed to evaluate students' ability to synthesize information according to Bloom's taxonomy.

Prerequisite: Successful completion of Algebra I

Expectations for Student Learning: Students will problem solve effectively and think critically.

Grade: 10-12	Credits: 5	Level: Honors	Course#: 121
		College Preparatory	122

ALGEBRA II: This course begins with a review of Algebra I skills such as solving and graphing equations and inequalities. The remainder of the course will focus on graphing linear, quadratic and absolute value functions, operations containing matrices, complex numbers, counting principles, and arithmetic and geometric series. Students studying at the honors level will work at an accelerated pace. They will investigate topics in depth with emphasis on critical thinking skills and applied problem-solving. Assessments are designed to evaluate students' ability to synthesize information according to Bloom's taxonomy.

Prerequisite: Successful completion of Algebra I

Expectations for Student Learning: Students will problem solve effectively and think critically.

Grade: 10-12	Credits: 5	Level: Honors	Course#: 131
	Credits:10	College Preparatory	132
	w/Enrichment		

ADVANCED ALGEBRA AND TRIGONOMETRY: This year long course is algebra based, with an emphasis on rational and radical functions and trigonometry. The course is designed for students whose background is not yet strong enough for pre-calculus, but intend to go on to college. There will be some SAT and ACT preparation before the exams in the fall.

Prerequisite: Successful completion of Algebra II

Expectations for Student Learning: Students will problem solve effectively and think critically.

Grade: 11-12	Credits: 5	Level: College Preparatory	Course#: 185
--------------	------------	----------------------------	--------------

PRE-CALCULUS: Students successful in this course will be prepared for either calculus or Advanced Placement Calculus. Students are exposed to familiar Algebra II topics, at a deeper level. New topics are also included, such as difference quotients, graphing various functions by hand, and trigonometry. Students

studying at the honors level will work at an accelerated pace, and more emphasis will be placed on graphing. Extensive use is made of the TI-83+ or the TI-84 graphing calculators. It is strongly recommended that the students have one of these calculators.

Prerequisite: Successful completion of Algebra II

Expectations for Student Learning: Students will problem solve effectively and think critically.

Grade: 11-12 Credits: 5 Level: Honors Course#: 142	Grade: 11-12	Credits: 5	Level: Honors	Course#: 142
--	--------------	------------	---------------	--------------

<u>ADVANCED PLACEMENT CALCULUS AB</u>: This is a complete full-year course in differential and integral calculus. Extensive use is made of the TI-84 graphing calculators. It is strongly recommended that the students have one of these calculators. The course is comparable to many college courses. <u>Summer work is a mandatory part of this course</u>.

There is a reduced cost for students on free/reduced lunch. Many colleges offer credit to students who achieve a passing score on the AP exam. **Students who enroll in this course must take the AP exam.**

Prerequisite: Successful completion of Pre-Calculus

Expectations for Student Learning: Students will problem solve effectively and think critically.

Gı	rade: 12	Credits: 5	Level: Advanced Placement	Course#: 140
----	----------	------------	---------------------------	--------------

HONORS STATISTICS AND PROBABILITY: This course combines introductory statistical topics and probability with real world mathematical applications. Statistical topics include analysis of one and two variable data, study and experimental design, and analysis of data. This course could be a good fit for students who are interested in social studies, business or sciences.

Expectations for Student Learning: Students will problem solve effectively and think critically.

Grade: 11-12	Credits: 5	Level: Honors	Course#: 172
--------------	------------	---------------	--------------

ADVANCED PLACEMENT CALCULUS BC: This is a complete full-year course in differential and integral calculus that is the equivalent of two semesters of college calculus. Topics include all content covered in AP Calculus AB plus: integration by parts, infinite series convergence and Taylor series, vector and polar functions, and limits of indeterminate forms. Extensive use is made of the TI-84 graphing calculators. It is

strongly recommended that the students have one of these calculators. Summer work is a mandatory part of this course.

*There is a reduced cost for students on free/reduced lunch. Many colleges offer credit to students who achieve a passing score on the AP exam. Students who enroll in this course must take the AP exam.

Prerequisite: Successful completion of AP Calculus AB.

Expectations for Student Learning: Students will problem solve effectively and think critically.

Grade: 11-12 Credits: 5	Level: Advanced Placement	Course#: 145
-------------------------	---------------------------	--------------

<u>ADVANCED PLACEMENT STATISTICS</u>: This advanced placement course in Statistics will cover the syllabus from the College Board. The purpose is to introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from the data. Students are exposed to four broad conceptual themes: Exploring Data, Sampling and Experimentations, Anticipating Patterns, and Statistical Inference. Students are required to take the official AP exam at the end of the year. <u>Summer work is a mandatory part of this course</u>.

There is a reduced cost for students on free/reduced lunch. Many colleges offer credit to students who achieve a passing score on the AP exam. **Students who enroll in this course must take the AP exam.**

Prerequisite: Successful completion of Algebra II

Expectations for Student Learning: Students will problem solve effectively and think critically.

Grade: 11-12	Credits: 5	Level: Advanced Placement	Course#: 139
--------------	------------	---------------------------	--------------

STATISTICS AND PERSONAL FINANCE: This course introduces basic statistical topics with real world mathematical applications. Statistical topics will include analysis of one and two variable data, study and experimental design, and analysis of data. Topics in personal finance will reinforce the general math topics (such as arithmetic, using rational numbers, measurement, ratio, and proportion) and applying these skills to consumer problems and situations. Applications may include budgeting, taxation, credit, banking services, insurance, buying and selling products and services, personal income and investment.

Expectations for Student Learning: Students will problem solve effectively and think critically.

Frade: 12 Credits: 5 Level: College Preparatory Course#: 173
--

MATH MODELING: This course is an introduction to mathematical modeling using graphical, numerical, symbolic, and verbal techniques to describe and explore real-world data phenomena. It is designed to prepare students to pass the 092 college math course at Mount Wachusett Community College. Emphasis is on the use of elementary functions to investigate and analyze applied problems and

questions, supported by the use of appropriate technology, and on effective communications of quantitative concepts and results.

Students who successfully complete this course and the final exam will receive a certificate of course completion and will be eligible for college level placement in math at MWCC.

Expectations for Student Learning: Students will problem solve effectively and think critically.

Grade: 12 Credits: 5 Level: College Preparatory Course#: 168
--

FOUNDATIONS OF MATHEMATICS: This course is intended to support 9th and 10th grade students by giving them the opportunity to enhance their basic understanding of mathematical concepts. In this course students will revisit skills such as, but not limited to, place value; percents; ratios and proportions; operations with decimals, fractions and integers; exponents; area, perimeter and volume; and order of operations. Students will receive explicit instruction in these areas. They will also have opportunities to further develop reasoning and problem-solving skills by practicing these skills in the context of real-world application problems.

Prerequisite: Teacher recommendation or teacher referral

Expectations for Student Learning: Students will problem solve effectively and think critically.

Grade: 9-10	Credits: 5	Level: College Preparatory	Course#: 1288
		go a separation,	

MATH ENRICHMENT: This course is taken in combination with Algebra II to support a student's understanding of concepts covered.

This course will not count towards Math credit required for graduation.

Grade: 9-12	Credits: 5	Level: Unweighted	Course#: 941 - Alg II
--------------------	------------	-------------------	-----------------------

PERFORMING ARTS

Music Education should be a basic part of every student's education. Participation in music activities stimulates creativity and contributes significantly to the aesthetic growth of each student. As student's work to develop skills in music, they are developing skills in self-discipline, flexible ways of thinking, concentration, decision-making, physical coordination, and aural perception. Successful participation in musical activities builds self-confidence, self-esteem, and a sense of responsibility and accomplishment.

As new standards are set throughout the state and country, our music curriculum is aimed to meet or exceed these standards. Study after study has proven that students who participate and are exposed to music have greater achievement in other academic areas. At Gardner High School, we are offering a wide range of classes and opportunities for all students to experience and appreciate music in our culture.

<u>CHORUS</u>: Chorus provides an opportunity for interested students to sign music in a large mixed choir (soprano, alto, tenor, and bass) from a variety of styles including classical and contemporary. Students will be introduced to proper vocal tone productions and the fundamentals of singing. They will become more proficient in sight-reading as they are exposed to many different musical works throughout the course. Performances will include in school and outside-of school concerts, competitions, festivals, and community events. Students may take chorus for more than one year.

Prerequisite: Reasonable competency at singing, reading music, and previous experience in a school choral program, or enrollment approval by the GHS Choral Director.

Expectations for Student Learning: Students will demonstrate creativity.

Grade: 9-12 Credits: 5	Level: College Preparatory	Course#: 541
------------------------	----------------------------	--------------

SYMPHONIC/MARCHING BAND: This is the largest instrumental ensemble at Gardner High School. The class does not require an audition and every student who plays a standard band instrument is expected to participate. Students will begin the year with the focus on Marching Band and transition to Symphonic Band during the second quarter. Students will be exposed to a variety of musical pieces and will be instructed on correct performance practices for each style. Performances will include in and out-of-school concerts, competitions, festivals, and community events. In addition, students may be required to attend summer rehearsals, band camp, and other out-of-school rehearsals during the Marching Band portion of the class. Students may take band for more than one year.

Prerequisite: Reasonable competency at singing, reading music, and previous experience in a school choral program, or enrollment approval by the GHS Choral Director.

Expectations for Student Learning: Students will demonstrate creativity.

Grade: 9-12 Credits: 5 Level: College Preparatory	Course#: 540
---	--------------

<u>COLORGUARD</u> (Fall Semester Only): This is a half-year performance-based class that will be offered during the 1st semester and will meet during the same period as band. Students enrolled in this class will perform with the Gardner High School Wildcat Marching Band. Performances will include in and out-of-school events such as marching band shows, parades, Fall Concert, Winter Concert, football games and

pep rallies. There is no prerequisite, however, students will be expected to commit to the full Marching Band schedule and attend summer rehearsals, band camp, and other out-of-school rehearsals with the color guard instructors. Students will learn the proper use of color guard equipment, rehearsal performance technique, basic dance movements and marching technique.

When the fall marching band season is complete halfway through the 2nd quarter students will work on individual technique with various types of color guard equipment and will work on a group performance project that will be featured as part of the Winter Concert. Students may take color guard more than once.

Expectations for Student Learning: Students will demonstrate creativity.

Grade: 9-12 Credits: 2.5	Level: College Preparatory	Course#: 544
--------------------------	----------------------------	--------------

<u>BEGINNING PIANO</u>: This half-year class is designed for students who have little to no experience playing the piano or reading music. Topics covered include reading music, piano keyboard technique, scales, and basic chords that can be used for harmonization. By the end of the course students will be able to play basic melodies with simple accompaniments in several keys.

There is no prerequisite for this class; however, it is not appropriate for students who have taken private lessons or those who are already proficient pianists.

Expectations for Student Learning: Students will demonstrate creativity

Grade: 8-12	Credits: 2.5	Level: College Preparatory	Course#: 542
-------------	--------------	----------------------------	--------------

<u>MUSIC TECHNOLOGY</u>: This course is designed for student musicians to explore and create music through technology-based experiences. Students will use computer and tablet music notation, composition, and creation applications to develop musicianship in a 21st century environment. Creativity, experimentation, and collaboration will be a major focus of this course, and students will be expected to learn and work independently by taking initiative to try new things to grow as musicians.

Prerequisite: It is recommended that students taking this course have some type of musical background.

Expectations for Student Learning: Students will demonstrate creativity.

Grade: 8-12	Credits: 2.5	Level: College Preparatory	Course#: 561
-------------	--------------	----------------------------	--------------

DRAMA/THEATRE: This is an elective course that focuses on basic acting techniques, interpreting dramatic literature, games, improvisation, pantomime, monologues, and script adaptations with performance. Students will develop vocal, physical and emotional control through analytical, creative and team building activities, as well as develop group and self-assessment skills to improve performance, Students will also be able to connect the literature from a variety of cultures and historical time periods to develop 21st century perspective on theatre and its connection to daily life to promote success after high school graduation. Reading, writing, rehearsing and memorizing are vital to success in this course. This class is interactive and energetic.

Expectations for Student Learning: Students will read and write effectively.

Grade: 8-12	Credits: 2.5	Level: College Preparatory	Course#: 064
-------------	--------------	----------------------------	--------------

<u>HISTORY OF ROCK AND ROLL</u>: This half year class begins with the history of how Rock music began in the early 1900's with its Blues roots and moves through Country music, Doo-Wop, and many styles of rock through the mid 1960's. We will discover the music of Elvis, Buddy Holly, Motown, the Beach Boys, the Beatles and many other rock legends.

Expectations for Student Learning: Students will demonstrate creativity.

Grade: 9-12 Credits: 2.5 Level: College Preparatory Course#: 345
--

ADVANCED PLACEMENT MUSIC THEORY: This class is designed for students who want to learn about advanced music theory. Students will develop a working knowledge and understanding of music analysis and composition. Topics in this class will be related to the Advanced Placement Music Theory exam. That is given at the end of the school year in May. Students in this course who are currently enrolled in musical ensembles such as band or chorus will also gain a better understanding of the music they perform on a daily basis. Summer work is a mandatory part of this course.

There is a reduced cost for students on free/reduced lunch. Many colleges offer credit to students who achieve a passing score on the AP exam. **Students who enroll in this course must take the AP exam.**

Expectations for Student Learning: Students will demonstrate creativity.

rade: 12 Credits: 5	Level: Advanced Preparatory	Course#: 590
---------------------	-----------------------------	--------------

DANCE EXPLORATION: This semester's course is designed to keep the body moving. Students will explore many dances including ballet, jazz, folk dances and many different modern routines. Students will be encouraged to choreograph and teach to the rest of the class, participate in others' routines, with the goal that we keep moving each day. This course is open to all levels of dance from beginner to advanced.

This class can be used as either an Art or PE credit.

Expectations for Student Learning: Students will demonstrate creativity.

Grade: 8-12 Credits: 2.5	Level: College Preparatory	Course#: 545
--------------------------	----------------------------	--------------

BEGINNING GUITAR: This half year course is designed for all levels of abilities from beginners to advanced players. The curriculum will be designed to challenge the students at the level of ability they have at the beginning of the semester. More advanced players will serve as mentors to beginner players. Individual students will develop goals for improvement and work on repertoire that challenges their current level.

Expectations for Student Learning: Students will demonstrate creativity.

Grade: 8-12 Credits: 2.5	Level: College Preparatory	Course#: 571
--------------------------	----------------------------	--------------

SCIENCE

The Gardner High School Science, Technology, Engineering, and Mathematics Department adheres to learning standards as set forth by the American Association for the Advancement of Science through its Project 2061 and the Massachusetts Comprehensive Assessment System. Expectations for student achievement reflect the standards of the National Association of Science Teachers, the National Association of Biology Teachers, the American Chemical Society, and the American Association of Physics Teachers.

The table below provides a guide for suggested routes of study to complete 3 years of science at GHS, in addition to all possible electives. Course selection should be made by using input from the student, the parents, the teacher, and the guidance counselor. Any elective that is available in a lower grade is available in upper grades.

	1
9th Grade	Honors or CP Biology Electives: CP Technology and Engineering Zoology The Science of Science Fiction
10th Grade	Honors or CP Chemistry Electives: Technology & Engineering Botany Zoology
11th Grade	Honors or CP Physics CP or AP Environmental Science Advanced Chemistry Electives: Anatomy & Physiology AP Biology AP Chemistry Technology & Engineering Forensics Science Criminology/Forensics II Zoology Wild Things-Investigating Invasive Species When Germs Attack
12th Grade	Honors or CP Anatomy & Physiology AP Chemistry AP Biology AP Physics II Advanced Chemistry Advanced Physics Electives: Zoology Criminology/Forensics II Botany Engineering & Physics I & II Wild Things-Investigating Invasive Species When Germs Attack

<u>BIOLOGY</u>: This course is geared towards preparing students for the Biology MCAS exam. Concepts will be introduced through lectures, discussions, activities, and will be reinforced through weekly laboratories. Topics in cellularity, biochemistry, genetics, evolution, body systems, diversity of life, and ecology are explored in the laboratory and the classroom. The same concepts taught in Honors Biology are taught in College Preparatory Biology, but in greater detail.

Expectations for Student Learning: Students will work collaboratively, problem solve critically, and communicate effectively.

Grade: 9-12	Credits: 5	Level: Honors		Course#: 211
			College Preparatory	212

<u>CHEMISTRY</u>: This course is developmentally appropriate, hands-on laboratory based program in which the basic chemical principles and skills students will need for college will be pursued. A variety of problem-solving techniques, laboratory activities, model building, and demonstrations are major components of this course. Both Honors Chemistry and College Preparatory Chemistry use algebraic principles throughout the course. College Preparatory Chemistry does so to a lesser extent.

Expectations for Student Learning: Students will work collaboratively, problem solve critically, and communicate effectively.

Grade: 10-12	Credits: 5	Level: Honors		Course#: 221
			College Preparatory	222

ADVANCED CHEMISTRY: Advanced Chemistry is a second-year chemistry course for students who are interested in advancing their knowledge in the field of chemistry. Students will review some of the fundamental concepts in first-year chemistry class and will move on to other advanced concepts. Students will explore many of the key topics in chemistry such as reaction kinetics, chemical equilibrium, thermodynamics, and electrochemistry. This course aims to further develop students' chemical content knowledge, critical thinking abilities, and problem solving skills. A solid level of understanding in mathematical problem solving is important for success in this course.

Prerequisite: Students have successfully completed chemistry and Algebra II.

Expectations for Student Learning: Students will work collaboratively, problem solve critically, and communicate effectively.

Grade: 11-12	Credits: 5	Level: Honors	Course#:	1204

<u>PHYSICS</u>: This course will give students a solid understanding of the concepts in Classical Physics. The course covers topics such as Newtonian Mechanics, Thermal Physics, Waves, Electricity and Magnetism. The curriculum is designed as a thorough introduction to Physics and prepares students who are interested in medical fields, engineering and physical science. It is very mathematics intensive. It is recommended that students have completed Algebra II and be concurrently taking H. Precalculus.

Expectations for Student Learning: Students will work collaboratively, problem solve critically, and communicate effectively.

Grade: 11-12	Credits: 5	Level: Honors		Course#: 231
		Col	lege Preparatory	232

ADVANCED PHYSICS: Advanced Physics is a second-year physics course for students who are interested in advancing their knowledge in the field of physics. Students will review some of the fundamental concepts in first-year physics class and will move on to other advanced concepts. Students will explore many of the key areas of physics such as 2D motion, rotational motion, thermal physics, waves, electricity and magnetism. This course aims to develop students' content knowledge, critical thinking abilities, and problem solving skills further. A solid level of understanding in mathematical problem solving is important for success in this course. Students who complete this course will be prepared to take AP physics 1 exam in May.

Prerequisite: Students have successfully completed first year introductory physics.

Expectations for Student Learning: Students will work collaboratively, problem solve critically, and communicate effectively.

Grade: 11-12	Credits: 5	Level: Honors	Course#:	1205

ANATOMY AND PHYSIOLOGY: This course is geared toward students interested in pursuing careers related to various fields in medicine, physical therapy, or sports medicine or for those interested in a more in-depth examination of the human body, which includes the study of the ten systems of the human body. Laboratory cats are dissected and serve as models of human anatomy and physiology. Demonstrations and laboratory experiments exemplify basic anatomy as well as physiological principles. Research papers and presentations integrate student learning to real life diseases and disorders. Interactive computer activities are conducted using Vernier, Physioex, and Interactive Physiology software. The same concepts taught in Honors Anatomy and Physiology are taught in College Preparatory Anatomy and Physiology, but in greater detail. Participation in dissections is mandatory.

Expectations for Student Learning: Students will work collaboratively, problem solve critically, and communicate effectively.

Grade: 11-12	Credits: 5	Level: Honors College Preparatory	Course#: 245 246

<u>BIOLOGY MCAS REVIEW</u>: This semester course is for students to prepare for the February MCAS retest. The course will review scientific concepts and standards that will be on the Biology exam. This course will also review testing strategies and techniques for test taking such as answering multiple choice and open response questions. This course is not considered a lab science and does not count toward the science requirement for graduation. This course is for students who have taken a Biology class and scored less than a 220 on the Biology MCAS exam.

Grade: 10-12	Level: Unweighted	Course#: 954
--------------	-------------------	--------------

<u>BOTANY</u>: This course is the scientific study of plants and their relationship to the environment. Students will investigate the growth, reproduction, anatomy, morphology, physiology, biochemistry, taxonomy, genetics, and ecology of plants. Laboratory and outdoor experiences complement classroom activities.

Expectations for Student Learning: Students will work collaboratively, problem solve critically, and communicate effectively.

Grade: 10-12 Credits: 2.5	Level: College Preparatory	Course#: 248
---------------------------	----------------------------	--------------

ENVIRONMENTAL SCIENCE: This is a full-year laboratory course that will focus on present-day problems in the environment. The study of energy flow, population dynamics, biodiversity, air and water pollution and toxic waste is explored. An emphasis will be placed on collection field data and we will use current technologies to support and analyze the data. The same concepts taught in Honors Environmental Science are taught in Environment Science, but in greater detail.

Expectations for Student Learning: : Students will work collaboratively, problem solve critically, and communicate effectively.

Grade: 11-12	Credits: 5	Level:	Honors	Course#: 253
			College Preparatory	252

<u>FORENSIC SCIENCE</u>: Forensic science is the application of science to law. This lab based course involves all areas of Science including: Biology, Anatomy, Chemistry, and Physics. There is an emphasis on complex reasoning and critical thinking. Topics will include: the basics of Forensic Science, crime scene analysis and reconstruction, impressions, prints (finger, lip and ear), blood splatter and typing entomology, teeth and toxicology. Due to the nature of the material, a certain level of maturity is required, as well as the ability to work in a safe manner.

Expectations for Student Learning: Students will work collaboratively, problem solve critically, and communicate effectively.

	Credits: 2.5	Level: College Preparatory	Course#: 227
10th with approval			

TECHNOLOGY/ENGINEERING: Students who are highly motivated, work well independently, are interested in high-tech careers and enjoy hands-on learning experiences should consider taking Technology/Engineering. This course encourages students to pursue global engineering questions and technological solutions that emphasizes research and problem solving using mathematical and scientific concepts. Students achieve a more advanced level of skill in engineering design by conceptualizing a game and building a game board. The game will be played with machines designed and built by students. The machines will be designed to apply all of the areas of study within the area of Technology Engineering. Students will learn how to solve the problem they've conceptualized by developing possible solutions, designing and building prototypes or models, and making modifications if necessary. Students will explore engineering design, construction technologies, energy and power technologies including fluid systems, thermal systems, electrical systems, and communication and manufacturing technologies.

Technology Engineering is designed to fully immerse the student in higher level problem solving activities that will require detailed lab reports that will include the following: proper research citations, orthographic drawings, test and evaluation analysis and redesign of the prototype.

This class can be used toward science graduation requirements.

Expectations for Student Learning: Students will work collaboratively, problem solve critically, and communicate effectively.

Grade: 9-12	Credits: 5	Level: College Preparatory	Course#: 242

ENGINEERING AND PHYSICS I: Engineering and Physics is an exciting hands-on semester class that enables students to apply physics concepts in designing a CO2 powered car. Concepts of Motion, forces, energy, and momentum will be applied along with the fundamentals of the "Engineering Design Process". Students will design and build cars, lunch them down a track at speeds that can reach up to 50 MPH. Students will then investigate and study the motion of their cars. They will then use the test results to help them redesign the vehicle in an attempt to make them go faster. After all the testing and investigation, students will demonstrate their final products in a formal competition to determine who has the fastest car.

Expectations for Student Learning: Students will work collaboratively, problem solve critically, and communicate effectively.

Grade: 11-12	Level: College Preparatory	Course#: 203
--------------	----------------------------	--------------

ENGINEERING AND PHYSICS II: Engineering and Physics II is an exciting hands-on semester class that enables students to apply physics concepts in designing a Robot. Concepts of Work, Energy and Power, Fluids, Waves, Electricity and Magnetism will be applied along with the fundamentals of the "Engineering Design Process". Students will design remote controlled robots that solve a problem in competitive game type setting. Students will then investigate the efficiency of their robots. They will then use the test results to help them redesign the robotic vehicle in an attempt to make them more efficient. After the testing and investigation, students will demonstrate their final products in a formal competition to determine who has the most efficient robot.

Expectations for Student Learning: Students will work collaboratively, problem solve critically, and communicate effectively.

Grade: 11-12	Level: College Preparatory	Course#: 206
--------------	----------------------------	--------------

ADVANCED PLACEMENT BIOLOGY: AP Biology is designed for students who wish a vigorous extension of their biological knowledge and a deeper understanding of science as a process. The course will be taught to meet the standards of the College Board AP Biology Curriculum. The content of this course will involve 8 units of study, Chemistry of Life; Cell Structure and Function; Cellular Energetics; Cell Communication and Cell Cycle; Heredity; Gene Expression and Regulation; Natural Selection; and Ecology. Use of College Board AP Classroom, Case Studies, POGILs, website videos, and laboratory experimentation and design will be a vital part of the course.

There is a reduced cost for students on free/reduced lunch. Many colleges offer credit to students who achieve a passing score on the AP exam. **Students who enroll in this course must take the AP exam.**

Expectations for Student Learning: Students will work collaboratively, problem solve critically, and communicate effectively.

Grade: 11-12 Credits: 5	Level: Advanced Placement	Course#: 220
-------------------------	---------------------------	--------------

<u>ADVANCED PLACEMENT CHEMISTRY</u>: This AP Chemistry course is designed for students who wish to attain a depth of understanding of the fundamentals of chemistry. The course will be taught to meet the standards of the National AP Chemistry Curriculum. Topics covered will include kinetics, equilibrium, thermodynamics, and electrochemistry with a review of atomic theory, kinetic molecular theory, bonding and stoichiometry. The course places emphasis upon critical quantitative thinking and lab work. Summer work is a mandatory part of this course.

There is a reduced cost for students on free/reduced lunch. Many colleges offer credit to students who achieve a passing score on the AP exam. **Students who enroll in this course must take the AP exam.**

Expectations for Student Learning: Students will work collaboratively, problem solve critically, and communicate effectively.

Grade: 11-12	Credits: 5	Level: Advanced Placement	Course#: 241
--------------	------------	---------------------------	--------------

ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE: The Advanced Placement Environmental Science course is an interdisciplinary examination of the natural world. The goal of the course is to provide an understanding of the interrelationships among the various systems of the earth. Additionally, the course examines human impact of environmental changes to air, land, and water quality, biodiversity, and climate change. Students are challenged to evaluate and create solutions of the imbalance of natural resources necessary to maintain a sustainable planet for an exponentially growing global population from both a technological and political perspective. Students enrolled in the course will take the Advanced Placement Environmental Science exam. Summer work is a mandatory part of this course.

There is a reduced cost for students on free/reduced lunch. Many colleges offer credit to students who achieve a passing score on the AP exam. **Students who enroll in this course must take the AP exam.**

Expectations for Student Learning: Students will work collaboratively, problem solve critically, and communicate effectively.

Grade: 11-12 Credits: 5	Level: Advanced Placement	Course#: 244
-------------------------	---------------------------	--------------

ADVANCED PLACEMENT PHYSICS II: This full-year course is equivalent to a second-semester college course in algebra-based physics. The course covers fluid mechanics, thermodynamics, electricity and magnetism, optics, and atomic and nuclear physics. 25% of instructional time is devoted to inquiry-based laboratory investigations that foster student engagement in the practice of science through experimenting, analyzing, making conjectures and arguments, and solving problems in a collaborative

setting, where students direct and monitor their progress. Students who enrolled in this course must take the AP Physics 2 exam in May. Students should have successfully completed first-year introductory physics. Students should also have taken or be concurrently taking honors pre-calculus. Highly capable and motivated students could take Honors Physics and AP physics 2 simultaneously if getting permission from the instructor.

Expectations for Student Learning: Students will problem solve effectively and think critically

Grade: 12	Credits: 5	Level: Advanced Placement	Course#: 250

CRIMINOLOGY/FORENSICS II: This is an interdisciplinary course spanning Science and Social Studies in a dual classroom setting. In this course, students will explore advanced topics in both Forensic and Criminal Psychology. Students will apply prior knowledge of both Forensics and Criminal Psychology through mock trial experiences regarding real and fictional cases and criminals. Students will engage in evidence gathering, trial procedures and criminal determination and punishment. Video presentations, expert guest speakers and field trips to local courts and law enforcement will be included when applicable and available.

Expectations for Student Learning: Students will problem solve effectively and think critically.

Prerequisite: Criminal Psychology

Grade: 11-12	Credits: 2.5	Level: College Preparatory	Course#: 372
--------------	--------------	----------------------------	--------------

WILD THINGS-INVESTIGATING INVASIVE SPECIES: Who would have thought that plants and animals could be considered a menace or threat to our waters or land? In this course, students will explore what makes something an invasive species, what kind of harm they can cause, where they come from, and what we can do about it. It will cover topics of biology, ecology, conservation and environmental science. Students will explore National and Regional Wildlife Refuges in our area where invasive species are a problem and multiple case studies will be examined as a way to explore this growing threat to our environment.

Expectations for Student Learning: Students will work collaboratively, problem solve critically, and communicate effectively.

Grade:8-12 Credits: 2.5	Level: College Preparatory	Course#: 1201
-------------------------	----------------------------	---------------

ZOOLOGY: Zoology is known as the study of animals. It has many unique subdivisions of fields, and this class gives students the chance to explore them. In this course, students will examine the methods of classification that various fields of biology use to categorize and describe different types of animals and their behavior. We will explore taxonomy, anatomy, physiology, and evolutionary lineage of organisms such as mammals, birds, fish, reptiles, amphibians and insects. This course will teach students to think on ultimate and proximate levels of animal behaviors and traits, training them to think in an evolutionary sense, mimicking real-life zoology. It will cover topics in biology, ecology, environmental science, anatomy and physiology and evolution.

Expectations for Student Learning: Students will work collaboratively, problem solve critically, and communicate effectively.

Grade: 8-12	Credits: 2.5	Level: College Preparatory	Course#: 1203

THE SCIENCE OF SCIENCE FICTION: This course is an inquiry-focused course where students will explore various scientific concepts that fuel the genre of science fiction. Students will be introduced to foundational life and physical science concepts as they apply to various phenomena in popular science fiction franchises such as Marvel comics, Star Wars, Jurassic Park, Star Trek, etc. There is an emphasis on inquiry, scientific method, critical thinking, and complex reasoning. This course will utilize lab techniques, research projects, and discourse.

Expectations for Student Learning: Students will work collaboratively, problem solve critically, and communicate effectively.

Grade: 8-9	Credits: 2.5	Level: College Preparatory	Course#: 228
------------	--------------	----------------------------	--------------

WHEN GERMS ATTACK: A LOOK AT THE HUMAN BODY: This course is geared toward students who are interested in learning about the human body in general by analyzing case studies and researching common diseases and disorders of the 10 body systems. Research papers and presentations will integrate student learning to real life diseases and disorders. Medical tests, such as urine tests, blood tests, PET scans, EKG's etc. will be analyzed. Dissection is not part of this course.

Expectations for Student Learning: Students will work collaboratively, problem solve critically, and communicate effectively.

Grade: 10-12	Credits: 2.5	Level: College Preparatory	Course#: 1202
--------------	--------------	----------------------------	---------------

SOCIAL STUDIES

The Gardner High School Social Studies Department sets a standard of excellence for its students and instructors. Four years of social studies courses are offered to meet the learning standards and requirements of the Massachusetts History and Social Science Framework. Under the Massachusetts Department of Education's Core Curriculum students must pass two years of United States History and one year of Modern World History. Through the study of history, geography, economics, civics and government, culture, and the related social sciences, our students will develop critical thinking skills and the core knowledge of the story of humanity. The goal of our program is to prepare the student for college and life in a capitalist democracy with increasing emphasis to connections with the global community. Research papers are required in all history classes.

MODERN WORLD HISTORY: The aim of this survey course is to provide a comprehensive study of the development of World History from the French Revolution (c. 1789) to the present day. All topics are aligned with the Massachusetts History and Social Sciences Curriculum Frameworks. Students are required to do essays and a research paper. A variety of assessments are used.

Expectations for Student Learning: Students will problem solve effectively and think critically.

Grade: 9-12	Credits: 5	Level:	Honors	Course#: 311
			College Preparatory	312

ADVANCED PLACEMENT HUMAN GEOGRAPHY: The purpose of this freshman full-year college-level course is to introduce students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students learn to employ spatial concepts and landscape analysis to examine human socio economic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications, comprehensive survey of human geographical patterns, throughout history. Students are required to complete an extensive summer reading assignment, read nightly, write intensively, analyze primary source documents, actively participate in class, and will take the **AP Human Geography exam. Students should be prepared to spend at least an hour every night completing these requirements. This course will cover various topics within the Massachusetts History and Social Science Frameworks. Students interested in taking this course should be prepared to devote a great deal of time toward achieving success. Self-motivation is essential.

This course can be used to meet the World History requirement.

There is a reduced cost for students on free/reduced lunch. Many colleges offer credit to students who achieve a passing score on the AP exam. **Students who enroll in this course must take the AP exam.**

Grade: 9 Credits: 5 Level: Advanced Placement Course#: 370
--

<u>UNITED STATES HISTORY I</u>: In year one of this two-year unified course, students will examine the historical and intellectual development during the Revolutionary and Constitutional era. In addition, industrialization, westward expansion, slavery, and the Civil War will be topics of focus. Students will study the social, political, intellectual, religious, and technological development of the United States through the Progressive Era and World War I. Students will study the global relations of the United States and other nations. All topics are aligned with the Massachusetts History and Social Sciences Curriculum Frameworks.

Expectations for Student Learning: Students will problem solve effectively and think critically.

Grade: 10-12	Credits: 5	Level:	Honors	Course#: 321
			College Preparatory	322

ADVANCED PLACEMENT WORLD HISTORY: In this sophomore full-year college-level course, students will explore key themes of world history, including interaction with the environment, cultures, state-building, economic systems, and social structures from approximately 1200 C.E. to the present. Students will learn to apply historical thinking skills including the ability to craft arguments from evidence; describe, analyze and evaluate events from a chronological perspective; compare and contextualize historical developments; and analyze evidence, reasoning and context to construct and understand historical interpretations. Students are required to complete an extensive summer reading assignment, read nightly, write intensively, analyze primary source documents, actively participate in class, and will take the **AP World History exam. Students should be prepared to spend at least an hour every night completing these requirements. This course will cover various topics within the Massachusetts History and Social Studies Sciences Frameworks. Students interested in taking this course should be prepared to devote a great deal of time toward achieving success. Self-motivation is essential. Summer work is a mandatory part of this course.

There is a reduced cost for students on free/reduced lunch. Many colleges offer credit to students who achieve a passing score on the AP exam. **Students who enroll in this course must take the AP exam.**

Expectations for Student Learning: Students will problem solve effectively and think critically.

Grade: 10	Credits: 5	Level: Advanced Placement	Course#: 380	

UNITED STATES HISTORY II: In the second year of the two-year unified course, students will analyze the causes and consequences of the Great Depression with a focus on principles of economics. Students will study the goals and accomplishments of the New Deal. Students will analyze the causes and contributing factors that led America into the Modern World stage through historical events of WWII, the Cold War, Vietnam, Civil Rights through September 11, 2001. Students will understand the relationship of the United States in recent events, trends, and beliefs that shape modern America. All topics are aligned with the current Massachusetts History and Social Sciences Curriculum Frameworks.

Grade: 10	Credits: 5	Level: Honors	Course#: 331
		College Preparatory	332

ADVANCED PLACEMENT UNITED STATES HISTORY: The purpose of this demanding college-level course is to provide a comprehensive survey of United States history from the arrival of the first Americans via the land bridge through the present. Students are required to complete an extensive summer reading assignment, read nightly, analyze primary source documents, write intensively, and will take the **United States AP exam. Students should be prepared to spend up to two hours per night completing these requirements. This course will cover topics listed in the Massachusetts History and Social Sciences Frameworks. Students interested in taking this course should be prepared to devote a great deal of time toward achieving success. Self-motivation is essential. All topics are aligned with the current Massachusetts History and Social Sciences Curriculum Frameworks. This course will take place during two periods each day throughout the year. Summer work is a mandatory part of this course.

There is a reduced cost for students on free/reduced lunch. Many colleges offer credit to students who achieve a passing score on the AP exam. **Students who enroll in this course must take the AP exam.**

Expectations for Student Learning: Students will problem solve effectively and think critically.

Grade: 11 Credits: 10	Level: Advanced Placement	Course#: 330
-----------------------	---------------------------	--------------

ADVANCED PLACEMENT UNITED STATES GOVERNMENT & POLITICS: The purpose of this full-year college-level course for seniors is to examine and evaluate the theories, organization, politics and policy concerns of the American government, with primary focus on the federal government. It is aligned with the Massachusetts History and Social Science Curriculum Frameworks. Emphasis will be placed on written and oral communication; collection, organization, and analysis of data; problem-solving; and cooperative group work. The course will also prepare students to take the **AP U.S. Government & Politics exam. Students interested in this offering should be prepared to devote a great deal of time to the work of this course, and to active classroom participation. Self-motivation is essential.

There is a reduced cost for students on free/reduced lunch. Many colleges offer credit to students who achieve a passing score on the AP exam. **Students who enroll in this course must take the AP exam.**

Expectations for Student Learning: Students will problem solve effectively and think critically.

Grade: 12	Credits: 5	Level: Advanced Placement	Course#: 340
-----------	------------	---------------------------	--------------

CRIMINAL PSYCHOLOGY: This very interactive course studies criminal behavior. Criminal psychology is the study of the wills, thoughts, intentions, and reactions of criminals. The study goes into the criminal mind by researching and studying some of the most infamous cases in criminal history. Students apply their knowledge of psychology and sociology towards a theoretical solution for criminal behavior. Students learn to apply terminology of law, criminology and psychology to discuss and debate the principles of criminal activity and society's reaction through the criminal justice system.

Grade: 11-12	Credits: 2.5	Level: College	Course#: 367
10th with approval		Preparatory	

TOPICS IN PSYCHOLOGY: This course will examine the psychological, biological and societal influences on human behavior in modern day society. The topics will include: the brain, perception, states of consciousness, human development, mental disorders and conventional/alternative therapies. The emphasis will be placed on hands-on learning through projects, small group discussion, role-plays and presentations. This course will prove useful to students seeking a career in the helping fields such as: nursing, teaching, counseling, physical therapy, animal science and medicine.

Expectations for Student Learning: Students will problem solve effectively and think critically.

Grade: 9-12 Credits: 2.5	Level: College Preparatory	Course#: 369
--------------------------	----------------------------	--------------

<u>CIVICS</u>: This course will investigate governments around the world and the foundation of American government with its legislative, executive, and judicial branches. Students will study the United States constitution and state and local governments including the juvenile and adult court systems. The students will compare the similarities and contrast the political systems throughout the government.

Expectations for Student Learning: Students will problem solve effectively and think critically.

Grade: 9-12	Credits: 2.5	Level: College Preparatory	Course#: 327
-------------	--------------	----------------------------	--------------

TOPICS IN SOCIOLOGY: In Introduction to Sociology students will examine the ways in which the environment and social institutions such as government, schools, family, socioeconomic status, and church affects a person's social development and socialization. The study of social behavior in interpersonal relationships, groups and the community will also be explored. Several instructional strategies, including: lecture, discussion and debate, guest speakers, and video will be utilized.

Expectations for Student Learning: Students will problem solve effectively and think critically.

Grade: 9-12 Credits: 2.5	Level: College Preparatory	Course#: 371
--------------------------	----------------------------	--------------

MILITARY HISTORY: This course is designed to educate students about significant developments in the history of human armed conflict. Emphasis will be placed on significant battles, the evolution of weaponry and tactics, and military leadership. Students selecting this course must be willing to participate in class discussion and debate, conduct research relating to military history, and take related notes. A multiplicity of teaching strategies will be employed including lectures, text, class discussion and debate, case studies, videos, websites, guest speakers and media information.

Grade: 9-12 Credits: 2.5 Level: College Preparatory	Course#: 368	
---	--------------	--

CRIMINOLOGY/FORENSICS II: This is an interdisciplinary course spanning Science and Social Studies in a dual classroom setting. In this course, students will explore advanced topics in both Forensics and Criminal Psychology. Students will apply prior knowledge of both Forensics and Criminal Psychology through mock trial experiences regarding real and fictional cases and criminals. Students will engage in evidence gathering, trial procedures and criminal determination and punishment. Video presentations, expert guest speakers and field trips to local courts and law enforcement will be included when applicable and available.

Expectations for Student Learning: Students will problem solve effectively and think critically.

Prerequisites: Criminal Psychology

Grade: 11-12	Credits: 2.5	Level: College Preparatory	Course#: 372
--------------	--------------	----------------------------	--------------

<u>HISTORY OF THE MIDDLE EAST</u>: This course would cover a broad cultural, religious, political, and geographical study of the historical roots of terrorism in the Middle East with an emphasis on Osama Bin Laden, 9/11, the War in Iraq, and global instances of jihadism. This course will teach students about the complexities of varied

cultures in the region and give insight into why there are many tensions in the area, and how those tensions are impacted by/impact the USA.

Grade: 9-12 Credits: 2.5	Level: College Preparatory	Course#: 391
--------------------------	----------------------------	--------------

HISTORY THROUGH FILM: The first talking films graced the big screen in the 1920's. Since then, it has become a classic American pastime. Movies are a great way to connect our lives to the lives of factual or fictional characters. Films can vary drastically, while some may carry a lighthearted message others may portray a more tragic narrative. This elective dives into films that guide students through major historical events and themes of the 20th century. Topics will be paired with Massachusetts History and Social Sciences Curriculum Frameworks in order to help develop context surrounding the film. Students will learn to evaluate the accuracy of films through a variety of assessments methods. Bring your own popcorn!

Grade: 9-12	Credits: 2.5	Level: College Preparatory	Course#: 1301
-------------	--------------	----------------------------	---------------

TECHNOLOGY/ENGINEERING

Technology/Engineering is the study of "how people modify the natural world to suit their own purposes" and generally refers to the diverse collection of processes and knowledge that people use to extend human capabilities and to satisfy human needs and wants. Since everyone uses technology, all students benefit from Technology/Engineering courses. Technology/Engineering is defined as a *core subject* by the Massachusetts Department of Education. The Learning Standards outlined in Strand 4 of the Massachusetts Science and Technology/Engineering Curriculum Framework are the guiding principles of the Technology/Engineering curriculum at Gardner High School.

INTRO TO WOODWORKING: This is an introductory course in woodworking technology. It includes the following: safety in the shop, drawing and planning a project. This course teaches the fundamentals of woodworking. You'll learn how to safely operate all shop machines and the proper use of hand and portable power tools. Emphasis will be placed on the designing, planning and selection phases used to construct a quality wood product. Curriculum is guided by the Massachusetts State Frameworks for Science, Engineering and Technology.

Expectations for Student Learning: Expectations for Student Learning: Students will think critically, listen actively and utilize technology effectively.

-12 Credits: 2.5 Level: C	lege Preparatory	Course#: 659
---------------------------	------------------	--------------

ADVANCED WOODWORKING: This is an advanced level course in woodworking. It includes the following: safety in the shop, drawing and planning a project. Its purpose is to provide more extensive experience to students who desire to explore the woodworking field in greater depth. Emphasis will be placed on technology used in carpentry, cabinet and furniture making, as well as more abstract type woodworking. Students will be given the opportunity to advance skills learned in Wood Technology I in areas of materials, machines, and procedures. Students will be expected to design and develop plans for an advanced project of their choice. Curriculum is guided by the Massachusetts State Frameworks for Science, Engineering, and Technology. Students can take this course more than once.

Prerequisite: Successful completion of Wood Technology I or Intro to Woodworking.

Expectations for Student Learning: Expectations for Student Learning: Students will think critically, listen actively and utilize technology effectively.

Grade: 9-12 Credits: 2.5	Level: College Preparatory	Course#: 660
--------------------------	----------------------------	--------------

TECHNOLOGY/ENGINEERING: Students who are highly motivated, work well independently, are interested in high-tech careers and enjoy hands-on learning experiences should consider taking Technology/Engineering. This course encourages students to pursue global engineering questions and technological solutions that emphasizes research and problem solving using mathematical and scientific concepts. Students achieve a more advanced level of skill in engineering design by conceptualizing a game and building a game board. The game will be played with machines designed and built by students. The machines will be designed to apply all of the areas of study within the area of Technology Engineering.

Students will learn how to solve the problem they've conceptualized by developing possible solutions, designing and building prototypes or models, and making modifications if necessary. Students will explore engineering design, construction technologies, energy and power technologies including fluid systems, thermal systems, electrical systems, and communication and manufacturing technologies. Technology Engineering is designed to fully immerse the student in higher level problem solving activities that will require detailed lab reports that will include the following: proper research citations, orthographic drawings, test and evaluation analysis and redesign of the prototype.

This class can be used toward science graduation requirements.

Expectations for Student Learning: Students will think critically, listen actively and utilize technology effectively.

Grade: 9-12 Credits: 5	Level: College Preparatory	Course#: 242
------------------------	----------------------------	--------------

ROBOTICS I: During this full-year course, students will engage in real-world applications of Science Technology/Engineering and Math (STEM) concepts through the use of the engineering design process. Through hands-on activities students will study engineering concepts including: Physics, programming, mechanical systems, and electrical & electronics systems. These concepts are delivered with a robotics emphasis through activities and projects using VEX Robotics hardware and easy C robotic programming software.

Expectations for Student Learning: Students will think critically, listen actively and utilize technology effectively.

Grade: 9-12	Credits: 5	Level: College Preparatory	Course#: 629
-------------	------------	----------------------------	--------------

ROBOTICS II: During this full-year course, students gain knowledge of the programming process as creating a sequence of instructions that tell a computational device, such as the microcontroller on a VEX Robot, how to perform a task. Students utilize VEX Robots hardware and easy C robotic programming software to understand robotic programming code: Radio Control Code, Autonomous Code, and Mixed Autonomous & Radio Control Code. Radio control code allows you to configure the way in which the radio control transmitter controls the robot, allowing a human operator to provide input to the robot. Autonomous code allows a robot to perform behaviors without input from the radio control transmitter. The robot follows pre-programmed routines responding only to sensor inputs. Autonomous code can be integrated with radio control code to achieve even better robot performance for complex tasks.

Prerequisite: Students will have successfully completed Robotics.

Expectations for Student Learning: Students will think critically, listen actively and utilize technology effectively.

Grade: 10-12 Credits: 5	Level: College Preparatory	Course#: 667
-------------------------	----------------------------	--------------

ENGINEERING AND PHYSICS I: Engineering and Physics is an exciting hands-on semester class that enables students to apply physics concepts in designing CO2 powered cars. Concepts of Motion, forces, energy and momentum will be applied along with the fundamentals of "Engineering Design Process".

Students will design and build cars, launch them down a track at speeds that can reach up to 50 MPH. Students will then investigate and study the motion of their cars. They will then use the test results to help them redesign the vehicle in an attempt to make them go faster. After all the testing and investigation, students will demonstrate their final products in a formal competition to determine who has the fastest car.

Prerequisite: Taking or have taken any level of physics courses.

Expectations for Student Learning: Students will think critically, listen actively and utilize technology effectively.

Grade: 11-12 Credi	ts: 2.5 Level: College Prepar	atory Course#: 203
--------------------	-------------------------------	--------------------

ENGINEERING AND PHYSICS II: Engineering and Physics II is an exciting hands-on semester class that enables students to apply physics concepts in designing a Robot, Concepts of Work, Energy and Power, Fluids, Waves, Electricity and Magnetism will be applied along with the fundamentals of the "Engineering Design Process". Students will design remote controlled robots that solve a problem in competitive game type setting. Students will then investigate the efficiency of their robots. They will then use the test results to help them redesign the robotic vehicle in an attempt to make them more efficient. After all the testing and investigation, students will demonstrate their final products in a formal competition to determine who has the most efficient robot.

Prerequisite: Taking or have taken any level of physics courses.

Expectations for Student Learning: Students will think critically, listen actively and utilize technology effectively.

Grade: 11-12	Credits: 2.5	Level: College Preparatory	Course#: 206	l
--------------	--------------	----------------------------	--------------	---

MANUFACTURING ADVANCEMENT CENTER WORKFORCE INNOVATION COLLABORATIVE

COURSES (MACWIC): The purpose of the Manufacturing Advancement Center Workforce Innovation Collaborative is to preserve manufacturing tribal knowledge and to execute the transfer of knowledge and critical skills to the current and future workforce. MACWIC has completed a consensus based credentialing system, the "Applied Manufacturing Technology Certification Pathway". This credentialing system defines a skills development pyramid and career pathway for individuals, companies, and educators. This credentialing system is designed to assist employers with identifying skills that are especially critical during the new hire selection and on-boarding process. The goal of this course is to get students through the first two levels of the MACWIC training.

Prerequisites: Successful completion of the CPT course

Expectations for Student Learning: Students will think critically, listen actively and utilize technology effectively.

Grade: 11-12	Credits: 5	Level: Honors	Course#: 1701
--------------	------------	---------------	---------------

CAD 101. INTRODUCTION TO CAD: This course is an introduction to computer assisted design (CAD) and learning to navigate both 2D and 3D design environments, using the application tools and features. The 2D basics will include menus, tabs, toolbars, drop-down lists, the command line, drawing space, layers, line types, and hatching; as well as creating, saving and opening files. Students will draw multiple views, isometrics, sections and auxiliary views of objects, including dimensions. The 3D basics will include menus, toolbars, drop-down menus, features, command manager, feature manager and drawing space. Students will create parts by drawing sketches and adding features. The parts will be combined to form an assembly and 2D drawings will be generated from the parts. Students will also learn to edit sketches and features, as well as add relations to their designs. The 2D CAD application introduced will be AutoCAD or DraftSight (an AutoCAD clone). The 3D CAD application introduced will be Solid Works, Inventor, Creo Parametric or NX. Since all of the 3D CAD applications function in similar ways, the knowledge of one can be extended to the others. Similarly, the knowledge of a 2D CAD application can be extended to another. This course is a fundamentals approach and requires no experience with other CAD programs.

Prerequisites: ENG 098, MAT 092, RDG 098, or placement.

Expectations for Student Learning: Students will think critically, listen actively and utilize technology effectively.

Grade: 11-12 Credits: 5	Level: Honors	Course#: 620
-------------------------	---------------	--------------

MAKERSPACE: MakerSpace at Gardner High School is a course where students will work collaboratively with other makers, creators, and designers to foster independent and creative problem solving through an authentic preparation for the real world from simulating real-world challenges. This hands-on course allows students to be creative, innovative, independent, and technologically literate. In addition, this course utilizes materials, tools, and equipment to allow students to combine engineering principles and artistic interests to take initiative, collaboration, persistence, and resourcefulness to produce the creation of engaging products.

Expectations for Student Learning: Students will think critically, listen actively and utilize technology effectively.

Grade: 9-12 (Credits: 2. 5	Level: College Preparatory	Course#: 400
---------------	---------------	----------------------------	--------------

CONSTRUCTION EXPERIENCE: Is a course offered to high school students. Students will participate in a variety of hands-on projects that provide a vehicle to cover the following topics: Shop Safety, Design and Planning, Hand Tool Processes, and Machine Processes. Students will work individually and/or in teams to build projects that will enhance the school and/or benefit the student body. This class will enhance students' critical thinking, problem solving and collaboration skills.

Expectations for Student Learning: Students will think critically, listen actively and utilize technology effectively.

Grade: 9-12	Credits: 2.5	Level: College Preparatory	Course#: 654
--------------------	--------------	----------------------------	--------------

STUDENT SUPPORT SERVICES

The Student Support Services (SSS) offered at GHS are designed to increase the high school retention and graduation rates of low-income, at-risk, students who wish to pursue educational goals and students with disabilities and to facilitate their transition from high school to postsecondary.

Services provided by the program include:

- Instruction in basic skills
- Tutoring
- Academic, personal, and career counseling
- Mentoring
- Special services for students with limited English proficiency

STRATEGIES FOR SUCCESS: This course is designed to help students develop study skills crucial for success in their academic classes. Specific skills taught include; organization, completing assignments, effective reading of textbooks, test taking, following directions, outlining and note taking skills. This course will also prepare students for the English/Language Arts portion of the MCAS exam. Students will review literary and poetic terms, review grammar skills, practice reading comprehension skills, work on open response questions, and practice writing for the long composition. Students will also prepare for the Mathematics portion of the MCAS exam, receiving tutoring to reinforce algebra and geometry concepts.

Expectations for Student Learning: Students will read and write effectively.

Grade: 9-12	Credits: 2.5	Level: Unweighted	Course#: 320
--------------------	--------------	-------------------	--------------

READING STRATEGIES: This course will endeavor to improve students' reading abilities using engaging texts from a variety of sources including, but not limited to Newsela.com and Readworks.org. Teachers will impart and students will employ a variety of research-based techniques that will enable students to identify the main idea ("gist") of a vocabulary in these texts. Reading scores on the state and district assessments will be used to place students in this course.

Grade: 8-9 Credits: 2.	Level: College Preparatory	Course#: 928
------------------------	----------------------------	--------------

MATH ENRICHMENT: This course is taken in combination withAlgebra II to support a student's understanding of concepts covered.

This course will not count towards Math credit required for graduation.

	Grade: 9-12	Credits: 2.5	Level: Unweighted	Course#: 941	
--	--------------------	--------------	-------------------	--------------	--

SPECIAL EDUCATION

The Special Education Department provides students who have special needs with successful academic experiences through the development of individual education programs (IEPs) that may include both special and general education classes. The primary goal of the department is to encourage maximum student involvement, to the extent appropriate, in general education classes.

Placement of individual students in a special education program occurs only through the Team evaluation process, which involves exploring and documenting alternatives attempted in general classes before referral to special education. This process follows from a pre-referral (SST Committee) convened by the Guidance Department. It is the intent of the Massachusetts Special Education Regulations that a program be designed to include the student in general education while addressing unique needs that may require specialized instruction or related services in order for that student to access the curriculum. It is the purpose of the Special Education Department, therefore, to identify those students who are in need of modifications and support and to provide them with the specialized instruction necessary for successful inclusion in the general school structure. Students' participation in the evaluation process, including attendance at Team meetings, is critical to their programming. Therefore, it is understood that IEP development includes student participation in program planning

ACADEMIC SUPPORT: Students attend Academic Lab in support of English, Mathematics, Social Studies, Science, and/or elective classes according to the goals set forth in their IEPs. Students are instructed in learning strategies, and they receive academic instruction in areas identified by their special education and general education teachers, who collaborate to meet students' needs in the classroom. (Team recommendation)

Expectation for Student Learning: Students will problem solve, write, and communicate effectively, think critically, and listen actively.

Grade: 9-12	Credits: 5	Level: Unweighted	Course#: 856 (10-12)
			861 (8-9)

READING STRATEGIES: This course will endeavor to improve students' reading abilities using engaging texts from a variety of sources including, but not limited to Newsela.com and Readworks.org. Teachers will impart and students will employ a variety of research-based techniques that will enable students to identify the main idea ("gist") of a vocabulary in these texts. Reading scores on the state and district assessments will be used to place students in this course.

Grade: 8-12	Credits: 2.5	Level: College Preparatory	Course#: 814
--------------------	--------------	----------------------------	--------------

STUDENT SUPPORT CENTER (SSC): This class is designed to offer both academic and social emotional support for students as per their IEP or for other students identified in special situations. Multiple staff (teachers, clinicians, etc) work together to offer intensive support to students on a daily basis to meet the individual needs of each student in the class.

Grade: 8-12	Credits: 5.0	Level: College Preparatory	Course#: 896	
--------------------	--------------	----------------------------	--------------	--

R.I.S.E.

The RISE (Resources in Special Education) Program at Gardner High School is designed to provide academic and vocational training for students in grades 9-12 who are at academic levels substantially below grade level. The primary goal of RISE is to provide opportunities to gain academic, independent living, prevocational, and social interaction/communication skills within and outside of the school setting. Students in the RISE Program learn academic and functional skills through a combination of classroom instruction, and school-based work and community experience. Students complete modified assignments in inclusive environments according to their IEP (Team recommendation).

RISE/ENGLISH: This course focuses on reading and literature, language, and composition strands in ELA on entry levels. There is emphasis on reading for information, comprehension of written materials, and using information across settings. A multi-sensory approach will be taken that allows students to more fully understand the main ideas, characters, and settings of topics.

Expectation for Student Learning: Students will problem solve, write, and communicate effectively, think critically, and listen actively.

Grade: 9-12	Credits: 5	Level: Unweighted	Course#: 973
--------------------	------------	-------------------	--------------

RISE/MATH: This course focuses on the basic operations in mathematics and everyday applications of these skills including counting money, time concepts, and measurement, budget and calculator skills. These skills will be taught in the classroom and then utilized in community environments to best provide generalized learning.

Expectation for Student Learning: Students will problem solve, write, and communicate effectively, think critically, and listen actively.

Grade: 9-12	Credits: 5	Level: Unweighted	Course#: 975
--------------------	------------	-------------------	--------------

<u>RISE/US HISTORY</u>: This modified course will have the students explore and demonstrate a general understanding of central past events and select people who have made an impact on our political, economic and/or social development in the United States. The students will use a variety of materials in this historical exploration including textbooks, reference materials, literature and multimedia.

Expectation for Student Learning: Students will problem solve, write, and communicate effectively, think critically, and listen actively.

Grade: 9-12 Credits: 5	Level: Unweighted	Course#: 987
------------------------	-------------------	--------------

RISE/BIOLOGY I: This course is intended to provide students with a better understanding of the scientific method, cell theory, characteristics and classification of living things and their relationship to the environment. The students will also have a better understanding of heredity and reproduction.

Expectation for Student Learning: Students will problem solve, write, and communicate effectively, think critically, and listen actively.

Grade: 9-12	Credits: 5	Level: Unweighted	Course#: 986
-------------	------------	-------------------	--------------

RISE/PRE-VOCATIONAL EXPERIENCES: This course is designed to provide students with work experiences starting with opportunities that are closely supervised, in-school jobs in order to build on skills that will be necessary for transitioning from high school. The focus of this course is to gain an understanding of work expectations, and to use good work habits in order to best prepare for future work experiences. The school-based work includes group projects and individual assignments including paper recycling, restocking machines and coolers, as well as school based businesses along with individual assignments.

.

Expectation for Student Learning: Students will problem solve, write, and communicate effectively, think critically, and listen actively.

Grade: 9-12	Credits: 5	Level: Unweighted	Course#: 971
--------------------	------------	-------------------	--------------

RISE/COMMUNITY AND RECREATIONAL SKILLS: This course allows students the opportunity to make choices in community and classroom settings in order to engage in individual and group activities in an age-appropriate manner. The emphasis is for students to be able to enjoy unstructured time at school through music, arts and crafts, movies, social activities, and museum visits that will carry over to settings besides school for lifelong learning. In addition, students will have the opportunity to use these skills in community settings. Accessing public services, acquiring information about transportation schedules, finding information about community offerings and availability will be covered with lessons in the classroom prior to community experiences.

Expectation for Student Learning: Students will problem solve, write, and communicate effectively, think critically, and listen actively.

Grade: 9-12	Credits: 5	Level: Unweighted	Course#: 974
--------------------	------------	-------------------	--------------

ENGLISH LANGUAGE LEARNERS

ELL INDEPENDENT STUDY: this independent study service is designed for students whose first language is not English. It is a foundation course that will help increase the students' written and oral proficiency. Students will focus on grammar, reading, writing and conversational skills.

Expectation for Student Learning: Students will problem solve, write, and communicate effectively, think critically, and listen actively.

Grade: 9-12	Credits: 5	Level: Unweighted	Course#: 472
--------------------	------------	-------------------	--------------

GOALS AND OBJECTIVES

I. Grammar and Writing Objectives - by the end of this course, students will:

- Understand the difference between the present continuous and present tense and be able to use the tenses in affirmative, negative and interrogative statements.
- Understand the use of frequency adverbs
- Understand the past tense, including the irregular forms
- Understand the future tense and use "will" and "be going to"
- Understand the difference between the present perfect and past tense and be able to use it in affirmative, negative and interrogative statements
- Be able to use subject, object and possessive pronouns and adjectives
- Be able to write a coherent paragraph, which includes a topic sentence, body and concluding sentence

II. Reading Objectives - by the end of the course, students will:

- Increase their individual vocabulary
- Improve their comprehension
- Improve their critical thinking

III. Conversation Objectives - by the end of this course, students will:

- Be able to incorporate the grammar structures learned in class in their everyday speech
- Be able to initiate and sustain a conversation
- Be able to narrate a story in the present, past and future
- Be able to ask for and give directions

This service will be taught exclusively in English. During the course, students will be presented with dialogues, readings, and exercises where they will be exposed to various grammar structures. They will practice these structures using question-answer, small and large group discussions and role-play. They will also incorporate these structures into the writing assignments that will be done on a weekly basis. During the reading portion of the course, the students will be presented with new vocabulary. They will work on reading passages, which improve their comprehension and critical thinking skills. Daily dictations will also be used to aid the students in their spelling.

ESL ENGLISH A: This ESL English class provides an in-depth study in vocabulary, language, grammar and literature to students who place into WIDA Level 1. This course will introduce the students to multiple genres of literature including novels, short stories, poetry and informational texts. Exploration of each genre literary elements including determination of theme and intent and examination of vocabulary and semantics will be included in the course content. The writing component of the course will focus on expository, descriptive, expressive and narrative writing. Students will continue to develop their listening, reading, writing and speaking skills throughout this course.

Expectation for Student Learning: Students will problem solve, write, and communicate effectively, think critically, and listen actively.

Grade: 9-12	Credits: 5	Level: Unweighted	Course#: 71
-------------	------------	-------------------	-------------

ESL ENGLISH B: This ESL English class provides an in-depth study in vocabulary, language, grammar and literature to students who place into WIDA Levels 2 and 3. The genre focus in this course will be fiction, poetry, drama and non-fiction. Students will develop reading strategies that will help them make connections to the readings and understand inferences. Along with reading, the students will explore expository, narrative and descriptive writing. There will be an additional focus on grammar, including verb tenses, adjectives and adverbs, and complex compounds sentences. Students will continue to develop their listening, reading, writing and speaking skills throughout this course.

Expectation for Student Learning: Students will problem solve, write, and communicate effectively, think critically, and listen actively.

Grade: 9-12	Credits: 5	Level: Unweighted	Course#: 72
-------------	------------	-------------------	-------------

ESL ENGLISH C: This ESL English class provides an in-depth study in vocabulary, language, grammar and literature to students who place into WIDA Levels 4 and 5. It emphasizes comprehension and critical thinking skills in the reading of texts and literature. Students will be exposed to literary techniques such as irony, symbolism and tone, through the genres of short story, nonfiction, drama and poetry. In order to develop critical thinking and analytical skills, students' writing assignments will focus on autobiographical essays, persuasive essays and literary analysis. Students will continue to develop their listening, reading, writing and speaking skills throughout the course.

Expectation for Student Learning: Students will problem solve, write, and communicate effectively, think critically, and listen actively.

Grade: 9-12 Credits: 5	Level: Unweighted	Course#: 73
------------------------	-------------------	-------------

EL STRATEGIES: This course is designed to help EL students access the core curriculum and develop study skills in order to be successful in their academic classes. Students will be taught specific skills such as organization and completing assignments, effective reading of textbooks, test taking strategies, understanding directions, outlining and note taking skills, all while working on improving their understanding and utilization of the English Language. Students will receive additional EL instruction in areas such as listening, speaking, reading, and writing when needs are identified by their EL teacher and/or general education teachers.

Expectation for Student Learning: Students will problem solve, write, and communicate effectively, think critically, and listen actively.

Grade: 9-12	Credits: 5	Level: College Preparatory	Course#: 319

ADDITIONAL COURSE OFFERINGS

COMMUNITY SERVICE

Credit for Community Service can be granted to students in grades 9-12. The goal of community service is for students to become aware citizens that see a responsibility to their community. A student can receive 1 credit for every 25 hours of community service completed, up to 5 credits per school year.

Community Service is separate from school activities and should be done within a non-profit organization. The concept of community service is to benefit the community. Although not limited to non-profit agencies, all non-profit agencies are considered places to earn community service hours. Such types of services include working with children, the elderly, shelters, churches, United Way organizations, and the Relay for Life to name a few. Students will seek out their own placements, which do not include helping your family.

Final approval from your guidance counselor and a Gardner High School Community Service Log will be required to receive credit upon completion.

ADVISORY: The Advisory block is designed to assist students with their academic, social and future-planning. This is done with the assistance of the Advisory Teacher and in turn, helps students make a connection with an adult in the building. The primary focus of the Advisory time is to work on the Individual Learning Plan (ILP). The ILP is a tool the student and advisor use to help the student identify academic, career and social goals for the school year. As part of their ILP, the advisor and student complete quarterly reviews of progress towards these goals.

Grade: 9-12	Credits: 2.5	Level: Unweighted	Course#: Grade 08 - 804
			Grade 09 - 806
			Grade 10 - 803
			Grade 11 - 800
			Grade 12 - 801

INDEPENDENT STUDY FOR CREDIT

Students who have demonstrated great interest in an area through completion of electives, and show a high level of personal responsibility, may pursue an Independent Study. The student interested in an independent study project must have a teacher-sponsor and a contract proposal outlining work to be accomplished. The proposal must be presented at least 2 weeks before the intended starting date for the course. Independent study is for seniors only. The principal has the authority to allow others to participate.

Independent Study credits will be approved on a case-by-case basis.

STRATEGIES FOR LIFELONG LEARNING: This class is designed to increase student knowledge and necessary skills for everyday living. This course will emphasize goal-setting, decision making and problem solving, effective communication, healthy lifestyles and relationships, personal safety, citizenship, and consumerism.

Grade: 8-12 Credits: 2.5	Level: College Preparatory	Course#: 820
--------------------------	----------------------------	--------------

<u>INTRODUCTION TO BUSINESS:</u> This course provides opportunities to learn and experience a variety of topics in the field of business. Students are exposed to various economies, their roles in our economy, entrepreneurship, marketing, managing financial and technological resources, and the use of social media. There will also be a focus on personal finance and money management.

Grade: 9-12 Credits: 2	Level: College Preparatory	Course#: 285
------------------------	----------------------------	--------------

FINANCIAL LITERACY: Using project-based instruction and real-world situations this course will give students the knowledge and general understanding of all key aspects of personal finances necessary to be successful now and throughout their adult lives. The structure of this class will reflect real-world situations as closely as possible.

Various opportunities to take this class will be made available to students to meet the graduation requirement.

Grade: 11-12	Credits: 2.5	Level: College Preparatory	Course#: 133
---------------------	--------------	----------------------------	--------------

MANUFACTURING ADVANCEMENT CENTER WORKFORCE INNOVATION COLLABORATIVE

COURSES (MACWIC): The purpose of the Manufacturing Advancement Center Workforce Innovation Collaborative is to preserve manufacturing tribal knowledge and to execute the transfer of knowledge and critical skills to the current and future workforce. MACWIC has completed a consensus based credentialing system, the "Applied Manufacturing Technology Certification Pathway". This credentialing system defines a skills development pyramid and career pathway for individuals, companies, and educators. This credentialing system is designed to assist employers with identifying skills that are especially critical during the new hire selection and on-boarding process. The goal of this course is to get students through the first two levels of the MACWIC training.

Prerequisites: Successful completion of the CPT course

Grade: 11-12	Credits: 5	Level: Honors	Course#:1701	
				П

INTERNSHIP OFFERINGS

YEARBOOK INTERNSHIP: This internship is intended to facilitate the completion of the Argus Yearbook. The goal is to gain experience in organizing and producing a yearbook as well as managing and training new staff members. The objective is to have the student experience putting together a yearbook which has real world applications in both the managerial and finance aspects. The program is graded as pass/fail and is unweighted. Acceptance is at the permission of the instructor only.

Grade: 11-12 Credits: 2.5 or 5 Level: Unweighted Course#: 955

IN-SCHOOL INTERNSHIP: This internship is designed as a semester or full-year elective course for juniors and seniors to assist a GHS teacher and to give students insight into the educational process. Teachers and students will establish an agreement/contract as to their responsibilities for the internship. Active participation and motivation is essential for this internship experience. The program is graded as pass/fail and is unweighted. The principal may approve students from different grades for internships.

Grade: 11-12	Credits: 2.5 or 5	Level: Unweighted	Course#: 989
--------------	-------------------	-------------------	--------------

SCHOOL TO CAREER INTERNSHIP: Students enrolled in this internship program gain first-hand experience in their chosen career field. Students are placed in various classrooms within the Gardner Public Schools, local business, industry and community-based organizations. Students participating in the internship program will continue to take classes in math, English, science, social studies and unified arts. At the work site, students recognize the applicability and importance of these academic and technical subjects. Most importantly, students will develop skills needed for lifelong learning and future success in the workplace. Students who have developed a strong career interest through participation in career awareness and planning programs, and are in good academic standing may apply for the internship. Students can earn up to 5 credits per semester depending on length of participation and must be approved by the principal. Site supervisors and students will establish an agreement/contract as to their responsibilities for the internship. The program is graded as pass/fail and is unweighted.

Grade: 11-12 Cro	redits: 2.5 or 5	Level: Unweighted	Course#: 950
------------------	------------------	-------------------	--------------

<u>DUAL ENROLLMENT COURSES AND MOUNT WACHUSETT COMMUNITY COLLEGE</u> <u>INITIATIVES</u>

In conjunction with Mount Wachusett Community College, Gardner High School will be offering college level courses to <u>eligible</u> juniors and seniors at <u>no cost</u> to the students. In addition to earning 5 high school credits for these courses, students will earn 3 college credits with passing grades. Classes are taught by both MWCC and GHS faculty and are offered at Gardner High School and/or Mount Wachusett Community College during the school day. Students may also be eligible for additional dual enrollment courses for a nominal fee during afternoon and evening hours.

Various Early College Pathways will be available for students who are interested in dual enrollment options. Besides the core courses in English, Math, Science and Social Studies, students will be offered additional courses in the Health Field, Technology, Business and Liberal Arts. A program specific to the health field funded through an HCOP grant (Health Career Opportunity Program) will offer classes for students interested in pursuing a career in an allied health related field.

With the exception of Math 096, college credits earned are transferable to those attending Mount Wachusett Community College or any state university. Private colleges may also accept these transfer credits at their discretion.

Students will need to place into dual enrollment courses by earning passing scores on the Accuplacer exam or through other agreed upon entrance criteria. The courses being offered will run based on student enrollment and may include:

EARLY COLLEGE DISTINCTION AWARD

In order to recognize our students who have participated in our Early College Program and who have challenged themselves with taking multiple college level courses during their junior and/or senior years, we have created the **Early College Distinction Award**. To be awarded this distinction at graduation, students must meet the following criteria:

- Receive passing grades and earn a minimum of 15 college credits, the equivalent of five college classes.
- Maintain good attendance; display good behavior; and present integrity and good citizenship when representing Gardner High School in the community (This will be reviewed by administration and guidance prior to receiving this award.)

ENG 101. COLLEGE WRITING I. 3 Credits. Students will develop college-level English writing skills with an emphasis on the writing process, an awareness of purpose and audience, and an understanding of grammar, punctuation, and sentence structure. Reading selections will foster improved writing skills and critical and analytical thinking. By semester's end, students will have produced at least four essays totaling 12-15 pages of original, polished prose, as well as additional writing in varied forms, such as journals, free-writes, peer review, reading responses, and rough drafts. Students are required to successfully complete the MWCC Library Research Skills MOOC and will write at least one paper that incorporates outside source material. Working with an instruction librarian on the research project is encouraged.

Prerequisites: ENG 098, RDG 098, FYE 101, or placement.

Grade: 11-12	Credits: 5	Level: Honors	Course#: 043	

ENG 102. COLLEGE WRITING II. 3 Credits. Writing about literary works will improve student writing, revision, critical thinking, and reading skills. The readings will be selected from a range of texts including fiction, non-fiction, poetry and drama. Evaluation and analysis will be accomplished through a variety of writing assignments, for example, discussion board posts, in-class writing, journals, free-writing, essay exams, and rough drafts of formal essays. By semester's end, students will have produced several pieces of writing totaling 12-15 pages of original, polished prose. At least one of the essays will incorporate library research that is cited and documented appropriately.

Prerequisite: ENG 101

Grade: 11-12	Credits: 5	Level: Honors	Course#: 044
--------------	------------	---------------	--------------

MAT 096. INTERMEDIATE ALGEBRA. 4 Credits. This course completes the developmental math curriculum and prepares students for the credit-bearing course Introduction to Functions & Modeling. Topics include: linear equations and inequalities, graphing equations, polynomials and exponents, factoring polynomials and solving equations, rational expressions, radical expressions quadratic equations and introduction to functions. Institutional credit only. Courses that earn institutional credit do not apply towards graduation. A GRADE OF "C" OR HIGHER IS REQUIRED FOR ADVANCEMENT TO NEXT COURSE.

Prerequisites: MAT 092 or placement.

	Grade: 11-12	Credits: 5	Level: Honors	Course#: 169
--	---------------------	------------	---------------	--------------

MAT 143. STATISTICS. 3 Credits. This course presents students with an understanding of elementary statistics by familiarizing them with basic concepts of measures of central tendency and variability, regression and correlation, probability, discrete and continuous random variables, the Central Limit Theorem, confidence intervals, and hypothesis testing. A calculator is required. MAT 093 is required for students taking this course who tested into and successfully completed MAT 092 with a grade of C or better.

Prerequisites: MAT 092 or placement; MAT 093 corequisite for students who tested into MAT 092 and successfully complete this course with a C or better.

Grade: 11-12 Credits: 5 Level: Honors Course#: 125
--

BIO 109. BIOLOGY I. 4 Credits. Biology, as a science, represents a way of interacting with the world in a rational manner. The nature of science, cellular structure and function, the molecules of life, the acquisition and use of energy by living organisms, the code of heredity, principles of genetics, and genetic recombination will be considered in this course. Lab sessions will be hands on experiences revolving around and applying the topics listed in the lab section of the syllabus.

Prerequisites: ENG 098, FYE 101, MAT 092, RDG 098, or placement.

Students may be required to take this course at the college campus due to the lab.

Grade: 11-12 Credits: 5 Level: Honors Course#: 210
--

BIO 113. LIFE SCIENCE FOR ALLIED HEALTH (FORMERLY BIO 099). 3 Credits. This course is designed to prepare students to succeed in Anatomy & Physiology I and II. Students build a foundation of biology concepts related to chemicals critical to life, cellular structure and function with emphasis on cellular transport, energy production and molecular genetics. Instruction will actively engage students in their learning and student success skills are integrated with the scientific body of knowledge as students prepare to enter various allied health programs. A GRADE OF 'C+' OR HIGHER IS REQUIRED FOR ADVANCEMENT TO NEXT COURSE.

Prerequisites: ENG 098, MAT 092 (or corequisite), RDG 098 or placement.

Grade: 11-12 Credits: 5 Level: Honors Cour	se#: 209
--	----------

PSY 110. HUMAN GROWTH AND DEVELOPMENT: 3 Credits. This course focuses on lifespan development through an examination of the biological, cognitive, and social domains and their interdependency. Students will study developmental changes from conception to late adulthood and will gain an understanding of how current research theories of human development translate into practice..

Prerequisite: <u>PSY 105</u>

	Grade: 11-12	Credits: 5	Level: Honors	Course#: 1810	
--	---------------------	------------	---------------	---------------	--

MGT 210. PRINCIPLES OF MANAGEMENT: 3 Credits. This course is a survey of traditional and contemporary principles of management and of the application of behavioral science and quantitative concepts to the solution of actual business organization problems. It is an introductory course dealing with the structure of business, its environment, and its relationship to society, and the individual members of the class. It examines the operation of business, how a firm's structure and management are determined, the methods by which companies produce products and services, the way they manage human and physical resources, market their goods and services, finance operations, and the techniques they use to control operations and meet their responsibilities.

Prerequisites: ENG 098, FYE 101, MAT 092, RDG 098, or placement.

Grade: 11-12 Credits: 5	Level: Honors	Course#: 1814
-------------------------	---------------	---------------

CPT 110. CAREER RESEARCH, DEVELOPMENT AND PORTFOLIO DESIGN. 3 Credits. This course is designed to introduce career planning as a lifelong process of incorporating an individual's multi-faceted roles within an ever-changing society. Issues of personal growth and development, work/family linkages, gender roles, diversity, empowerment, and transitions will be explored as a foundation for career development. Opportunities will be provided to explore and identify individual interests, attitudes, values, and skills. Students will investigate various occupational requirements and work environments with the purpose of formulating an integrated career/life plan. Participants will be assisted in developing the necessary skills to conduct a successful job search campaign. Topics to be addressed include focused and realistic career objectives, job market strategies, career networking, interviewing, resume writing, cover letters, and professional communication competencies. Students will complete their personal portfolios as well as a

Prerequisites: ENG 098, FYE 101, RDG 098, or placement, or permission of division dean.

Grade 1 12 Creatist 5 Ecven Frontis Course 710		Grade: 11-12	Credits: 5	Level: Honors	Course#: 718
--	--	--------------	------------	---------------	--------------

<u>HIS 202. HISTORY OF UNITED STATES II.</u> 3 Credits. This course will begin with the Reconstruction and will examine the social, economic, and political issues of the late nineteenth century as the country moved from an agrarian society to an industrialized nation, the emergence of the United States as a world power with World War I, the effects of the Great Depression on society and government, World War II, the Korean War, the Cold War, the Civil Rights Movement, Vietnam, Women's Rights, the War on Terror, and the challenges that America faces as it moves into a new century.

Prerequisites: ENG 098, FYE 101, RDG 098, or placement.

presentation portfolio.

Grade: 11-12	Credits: 5	Level: Honors	Course#: 317
--------------	------------	---------------	--------------

<u>PSY 105. INTRODUCTION TO PSYCHOLOGY.</u> 3 Credits. Students are introduced to the basic concepts and methods of psychology. Course content surveys scientific methods, the brain and nervous system, sensation and perception, consciousness, learning and memory, personality, psychological disorders, and treatment.

Prerequisites: ENG 098, FYE 101, RDG 098, or placement.

Grade: 11-1	2 Credits: 5	Level: Honors	Course#: 343
-------------	--------------	---------------	--------------

POL 211. INTRODUCTION TO AMERICAN GOVERNMENT AND POLITICS: 3 Credits. This course examines the structure of the national government including the major political institutions of the Presidency, the Congress and the Judiciary. Theory and function of the interaction between these institutions and their constitutional origins and scope will be analyzed. This course will examine the jurisdiction and interplay of both the Federal and State governmental authority under our American system of Federalism. The political process, elections and political party involvement in the function and form of our constitutional government on the federal, state and local level will be examined.

Prerequisites: ENG 098, FYE 101, RDG 098, or placement

Grade: 11-12 Credits: 5	Level: Honors	Course#: 482
-------------------------	---------------	--------------

SOC 103. INTRODUCTION TO SOCIOLOGY. 3 Credits. Students are introduced to the scientific study of society through basic sociological concepts. Concepts covered will include culture, socialization, social statuses and roles, social inequalities (race, class, gender and age), social institutions (such as family, education, religion, economy, government, politics, media and health), deviance, and social change. In order to create global awareness, students will develop critical thinking skills by making connections between their own lives and the broader social community. Students will be introduced to theoretical perspectives of sociology and use these theories to examine the various topics. Students will also examine and explain systems of stratification; and critically apply the concepts discussed to issues in their lives and the world.

Prerequisites: ENG 098, FYE 101, RDG 098

Grade: 11-12 Credits: 5 Level: Honors Course#: 344		
--	--	--

CAD 101. INTRODUCTION TO CAD. 3 Credits. This course is an introduction to computer assisted design (CAD) and learning to navigate both 2D and 3D design environments, using the application tools and features. The 2D basics will include menus, tabs, toolbars, drop-down lists, the command line, drawing space, layers, line types, and hatching; as well as creating, saving and opening files. Students will draw multiple views, isometrics, sections and auxiliary views of objects, including dimensions. The 3D basics will include menus, toolbars, drop-down menus, features, command manager, feature manager and drawing space. Students will create parts by drawing sketches and adding features. The parts will be combined to form an assembly and 2D drawings will be generated from the parts. Students will also learn to edit sketches and features, as well as add relations to their designs. The 2D CAD application introduced will be AutoCAD or DraftSight (an AutoCAD clone). The 3D CAD application introduced will be Solid Works, Inventor, Creo Parametric or NX. Since all of the 3D CAD applications function in similar ways, the knowledge of one can be extended the others. Similarly, the knowledge of a 2D CAD application can be extended to another. This course is a fundamentals approach and requires no experience with other CAD programs.

Prerequisites: ENG 098, FYE 101, MAT 092, RDG 098, or placement.

Grade: 11-12 Credits: 5 Level: Honors Course#: 620	Grade: 11-12	Credits: 5	Level: Honors	Course#: 620
--	--------------	------------	---------------	--------------

CIS 128. INTRODUCTION TO INFORMATION SYSTEMS (COMPUTER INFORMATION

SYSTEMS). 3 Credits. This course provides a broad overview of information systems and their components. Students will learn the basic concepts of systems, business and web services software, networks, data storage and management, information and systems security and the development of information systems. Word processing, spreadsheet and database applications are utilized throughout the course to apply concepts to real-world examples. Electronic communication, presentation, and collaboration applications are also utilized to develop essential computing skills.

Prerequisite: ENG 098, RDG 098, FYE 101, or placement.

Grade: 11-12 Credits: 5 Level: Honors Course#: 922
--

<u>ACC 101. PRINCIPLES OF ACCOUNTING I.</u> 3 Credits. This course covers the basic accounting principles necessary for an intelligent understanding of the books and records used in business: debits and credits; opening and closing books; classification and analysis of accounts; controlling accounts; trial balance; working papers; and the preparation of financial statements.

Prerequisites: FYE 101, MAT 092, RDG 098, ENG 098 or placement.

Grade: 11-12 Credits:	Level: Honors	Course#: 291
-----------------------	---------------	--------------

<u>ECO 101. MACROECONOMICS.</u> 3 Credits. This course covers macroeconomic analysis of prevailing patterns of economic institutions, banking systems, monetary and fiscal policies, public debt, and supply and demand. This course may be used as a business or social science elective.

Prerequisites: ENG 101 (or corequisite), MAT 092, or placement.

	Grade: 11-12	Credits: 5	Level: Honors	Course#: 294
--	--------------	------------	---------------	--------------

ALTERNATIVE COURSE OFFERINGS

(with prior written approval of administration)

MAKE UP CREDIT/SUMMER SCHOOL

In order to receive full credit for courses taken elsewhere as a result of failing a regular Gardner High School course, the student must satisfy the following criteria:

In order to participate in a summer school program the student must have achieved a final grade of at least 50% in the failed course or the principal's discretion. Students earning a 60 or above in a makeup/summer school course will earn a "P" for the course. The course must be submitted for approval to the principal prior to registering.

CREDIT RECOVERY

Credit Recovery Courses are designed to provide students who had previously lost partial or all credit, due to varying issues. Students will regain that credit through satisfactorily completing coursework including readings, discussions, and comprehension of main concepts, writings, study guides, and quizzes. Students will perform tasks and learn on their own time at their own pace. Students will be required to periodically meet with teachers to discuss goals and objectives as well as progress. Subjects offered vary, but include English, Social Studies, Science, and Math.

Expectations for student learning: Students will think critically, read, write, and communicate effectively, demonstrate creativity, utilize technology effectively, and problem solve effectively.

OUTSIDE COURSES

Courses for make-up credit may be taken, but the cost is the student's responsibility. Outside courses must be pre-approved by the student's guidance counselor, and principal. It is the student's responsibility to make sure their official grades are forwarded to the Gardner High School Guidance Office.

GARDNER ACADEMY FOR LEARNING AND TECHNOLOGY (GALT)

With purpose and direction, the GALT Program is available for students faced by challenges within traditional academic and curriculum programming. The GALT School is committed to promoting both academic and personal growth for students to prepare them for post-secondary endeavors, or the eventual reintegration into traditional educational settings. The ultimate mission of the program is to enhance the learning abilities of each student and bring them to a point of realization relevant to those abilities.

The Gardner Public School's GALT Program supports students in recognizing their strengths through individualized programming while providing the opportunity to participate in an alternative education setting. The Prospects Program stresses academic achievement through a specialized approach that blends and builds upon aspects of community, shared learning, social development, and independence. We believe that by giving students a specialized alternative setting, they will realize their potential in educational and career exploration.

GENERAL INFORMATION

LEGAL ASSISTANCE

Chapter 622 of the Acts of 1971 guarantees access to all public schools and public school programs, courses, advantages, and privileges without regard to race, color, sex, religion, or national origin.

TITLE IX OF THE EDUCATION AMENDMENTS OF 1972 PUBLIC LAW 92-318

"No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefit of, or be subjected to discrimination under any education program or activity receiving federal financial assistance".

PARENT-TEACHER COOPERATION

The school wishes to offer the richest possible educational experience for each student. This cannot occur without full communication between parents and the school. Parents are urged to maintain close contact with teachers, counselors, and administration. This process begins with careful review of the courses available to the student each year, and signature approval by parents on the course selection sheet in this booklet. The e-mail addresses for teachers are available by visiting the www.gardnerk12.org website. Parents are encouraged to contact teachers directly with concerns about their child's academic progress and use Plus Portal to check student's grades weekly.

ONLINE GRADES AND ATTENDANCE

Parents and students should access student grades online. Plus Portal allows individuals to see current information regarding a student's grades (homework, quizzes, classwork, and exams), attendance, and assignments. In addition, it allows teachers to post questions for online discussions. Please email our guidance secretary at lebland@gardnerk12.org for your login information.

REPORT CARDS

Report cards are issued four (4) times per year; approximate time - every ten weeks (November, January, April and June). Report cards are distributed through the student's homeroom. If you do not receive a report card from your child within two weeks after the marking period ends, please contact the school.

INCOMPLETES

The student must make up all incomplete grades on a report card, and grades submitted by their teacher within ten (10) school days from the day report cards are issued. The principal must approve any exceptions to this time limit in advance.

PROGRESS REPORTS

Progress Reports are given to the student midway through each term to indicate the present status of a student's work. Progress reports are another way of communicating between parents and teachers, in order to assist the student in improving his/her performance. With close cooperation between parents and the school, the number of unsatisfactory grades can be considerably reduced. **A passing grade on a progress report does not necessarily assure a passing grade at term's end.** Please contact the teacher if you have any questions.

TRANSFERRING FROM GHS

In the event a student transfers to another school, students will be provided with updated earned marks from their current courses. Partial credit is not awarded upon transferring. Credit is awarded at the completion of the course or at the end of the semester.